

革新求進 守正惠民

INNOVATING FOR ADVANCEMENT SERVING THE COMMUNITY WITH INTEGRITY



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抱負 VISION

致力提供優質機電工程服務，精益求精，以提升市民的生活質素。
To improve the quality of life for our community through continuous enhancement of our electrical and mechanical engineering services.

使命 MISSION

客戶 CUSTOMER
提供優質的工程方案，以滿足客戶的需要。
Providing quality engineering solutions to satisfy our customers' needs.

員工 STAFF
建立一支卓越的員工隊伍，並維持和諧的工作環境。
Developing a competent workforce and maintaining a harmonious environment.

部門 ORGANISATION
擁抱創新及科技提供更佳服務。
Embracing innovation and technology for service enhancement.

信念 VALUES

誠信 INTEGRITY
我們秉持誠信，維持良好道德操守。
We uphold honesty and integrity to embrace an ethical culture.

出色服務 SERVICE EXCELLENCE
我們提供安全可靠、高效率、具成本效益及利惠環保的全面優質服務。
We provide comprehensive quality services that are safe, reliable, efficient, cost-effective and environment-friendly.

關懷 CARING
我們關懷員工、客戶和市民大眾，並重視環保。
We care for our staff, customers, community and the environment.

以客為本 CUSTOMER FOCUS
為滿足客戶的各種需要，我們盡心竭力，積極提供工程方案，以贏取客戶的信任和 support。
We focus on the needs of our customers and provide engineering solutions in a proactive and responsible manner to win their trust and support.

靈活創新 AGILITY AND INNOVATION
我們重視靈活及創新的企業文化。
We treasure our agile and innovative corporate culture.

承擔 COMMITMENT
我們言行一致，信守承諾。
We do what we promise.

常務委員會 EXECUTIVE BOARD



主席 CHAIRMAN

劉俊傑太平紳士
Mr Lau Chun-kit, Ricky, JP
發展局常任秘書長（工務）
Permanent Secretary for Development (Works)



成員 MEMBERS

何英傑太平紳士
Mr Ho Ying-kit, Tony, JP
發展局副秘書長（工務）3
Deputy Secretary for Development (Works) 3

潘國英太平紳士
Mr Poon Kwok-ying, Raymond, JP
機電工程營運基金總經理
（機電工程署署長）
General Manager, EMSTF
(Director of Electrical and Mechanical Services)

周厚強太平紳士
Mr Chow Hau-keung, Vincent, JP
機電工程署副署長/營運服務
Deputy Director/Trading Services, EMSD

秘書 SECRETARY

韋美珠女士
Ms Wai Mei-chu, Jenny
機電工程署主任秘書
Departmental Secretary, EMSD



管理委員會 MANAGEMENT BOARD

主席 CHAIRMAN

- 01 潘國英太平紳士**
Mr Poon Kwok-ying, Raymond, JP
機電工程營運基金總經理
(機電工程署署長)
General Manager, EMSTF
(Director of Electrical and Mechanical Services)

成員 MEMBERS

- 02 周厚強太平紳士**
Mr Chow Hau-keung, Vincent, JP
機電工程署副署長 / 營運服務
Deputy Director/Trading Services, EMSD

- 03 姚德泰先生**
Mr Yiu Tak-tai, Boris
機電工程署助理署長 /1
Assistant Director/1, EMSD

- 04 楊秀權先生**
Mr Yeung Sau-ken, Sammy
機電工程署助理署長 /2
Assistant Director/2, EMSD

- 05 李志良先生**
Mr Lee Chi-leung, Eric
機電工程署助理署長 /3
Assistant Director/3, EMSD

- 06 黃妍旻女士**
Ms Wong Yin-man, Yammy
機電工程署總庫務會計師 / 財政管理
Chief Treasury Accountant/
Financial Management, EMSD

- 07 鄭元峰先生**
Mr Cheng Yuen-fung
署理機電工程署員工關係主任
Staff Relations Officer (Acting), EMSD

- 08 韋美珠女士**
Ms Wai Mei-chu, Jenny
機電工程署主任秘書
Departmental Secretary, EMSD

秘書 SECRETARY

- 09 王瑩瑩女士**
Ms Wong Ying-ying, Regina
機電工程署高級機電工程師 / 技術服務
Senior Engineer/Technical Services, EMSD



* 陳志偉太平紳士出任機電工程署副署長/營運服務至2024年8月6日
Mr Chan Chi-wai, Richard, JP was Deputy Director/Trading Services, EMSD up to 6 August 2024
* 李志良先生出任機電工程署助理署長/1至2024年12月22日
Mr Lee Chi-leung, Eric was Assistant Director/1, EMSD up to 22 December 2024

* 李學賢先生出任機電工程署助理署長/3至2024年12月22日
Mr Lee Hok-yin, Arthur was Assistant Director/3, EMSD up to 22 December 2024
* 劉志偉先生出任機電工程署員工關係主任至2025年4月21日
Mr Lau Chi-wai, Wilfred was Staff Relations Officer, EMSD up to 21 April 2025

總經理報告

GENERAL MANAGER'S REPORT

機電工程營運基金(營運基金)在2024/25年度成果豐盛。我們秉持創新、以客為本和追求卓越服務的精神，透過各項策略計劃，為客戶和市民創造重大價值。年內，營運基金總收入達98.33億港元，較上年度增長6%，收入回報率微升至2.4%，符合我們收回成本的營運原則。

營運基金的卓越表現，促使我們回顧過往成就，並專注發展最具變革創新潛力的項目，這對推動營運基金服務持續進步和改善民生福祉至關重要。

亮點：持續進步 服務社會

《行政長官2024年施政報告》以「齊改革同發展惠民生建未來」為主題，營運基金緊扣這個方向，加快創新步伐，深化與各方合作，為香港締造更美好前景。我們的業務取得長足進展，與多個政府部門和公營機構簽訂或續簽服務水平協議，進一步提升財政穩定性和服務質素。我們的創新科技(創科)工作獲國際肯定，在第50屆日內瓦國際發明展榮獲12個獎項，包括享負盛名的日內瓦州特別大獎，這是中華人民共和國香港特別行政區政府部門首次獲頒該項殊榮。

The Electrical and Mechanical Services Trading Fund (EMSTF) delivered a fruitful year in 2024/25, creating significant value for clients and the public through strategic initiatives rooted in innovation and customer-focused service excellence. Total revenue reached HK\$9,833 million, marking a 6% increase over the previous year. Return on revenue rose slightly to 2.4%, in line with our cost-recovery operating principle.

This strong performance has prompted us to reflect on past achievements and concentrate on initiatives with the greatest potential for transformative innovation, which is an essential driver for advancing EMSTF services and enhancing people's livelihood and wellbeing.

HIGHLIGHTS: CONTINUOUS ADVANCEMENT AND SERVING THE COMMUNITY

Guided by the Chief Executive's 2024 Policy Address themed "Reform for Enhancing Development and Building Our Future Together", the EMSTF accelerated innovation and fostered multipartite collaboration to shape a brighter future for Hong Kong. We made significant strides by securing new and renewed Service Level Agreements with various government departments and public bodies, further enhancing our financial stability and service quality. Our innovation and technology (I&T) efforts gained international recognition, earning 12 awards at the 50th International Exhibition of Inventions of Geneva, including the prestigious Prize of the Republic and Canton of Geneva, a great honour first ever awarded to departments of the Government of the Hong Kong Special Administrative Region of the People's Republic of China.

潘國英太平紳士
Mr Poon Kwok-ying, Raymond, JP

機電工程營運基金總經理
General Manager, Electrical and Mechanical
Services Trading Fund



總經理報告

GENERAL MANAGER'S REPORT

我們為政府建築物推行節能措施，推動環境可持續發展，協助政府提前達成「綠色能源目標」，整體能源表現提升6%。同時，我們加強水浸監測技術和緊急應變能力，在惡劣天氣下保障關鍵機電資產安全，確保基本公共服務不受影響。

營運基金2024年的客戶意見調查結果，反映客戶對我們的卓越服務相當滿意。以8分為滿分計，客戶滿意指數(7.27分)和整體服務競爭力指數(7.38分)均創歷史新高。客戶高度讚賞我們靈活應變、協作解難、度身訂造的服務，以及具前瞻性的創科應用。

創新轉型 求變發展

營運基金自1996年成立以來，創新一直深植於我們的基因。我們致力推動變革性創科項目，最新例子包括支援香港的氫燃料計劃和低空經濟發展。

我們的規管服務團隊協助環境及生態局擬備《氣體安全條例》(第51章)的修訂草案，並於2025年4月成功提交立法會。該修訂草案為安全使用氫氣作燃料建立規管架構，涵蓋全面的安全和技術要求。同時，營運基金為食物環境衛生署的氫燃料電池洗街車試驗計劃提供技術支援，推動在日常生活中使用更潔淨的能源。

我們亦開始制訂本港綠色氫能認證計劃的框架。憑藉技術專長，以及與國際和中國標準機構的緊密聯繫，機電工程署(機電署)具備獨特優勢，協助制訂一套適用於本港、中國內地(內地)、區域以至全球市場的標準。這項舉措潛力巨大，有助推動減碳和本港綠色金融產業發展。

為推動在2024年《施政報告》中強調的低空經濟，我們與消防處合作，修改其地面數碼集群無線電系統的微波連接網絡，轉用通訊事務管理局辦公室編配的新頻帶，從而釋放更多頻譜供新興低空經濟活動應用，例如無人機緊急救援、基建設施巡查、包裹派遞和空中的士服務。

We advanced environmental sustainability through energy-saving initiatives across government buildings, contributing to the Government's "Green Energy Target" of a 6% improvement in overall energy performance ahead of schedule. Our enhanced flood monitoring technologies and emergency response capabilities safeguarded critical electrical and mechanical (E&M) assets and ensured the continuity of essential public services during severe weather events.

Client satisfaction reflects our service excellence, as evidenced by the 2024 Customer Opinion Survey results. The EMSTF achieved record highs in both the Customer Satisfaction Index (7.27) and the Overall Service Competitiveness Index (7.38) on an 8-point scale. Clients highly praised our flexibility, collaborative problem-solving, customised services, and forward-looking approach to I&T adoption.

“INNO-TRANSFORMATION” FOR ADVANCEMENT

Innovation has been embedded in the EMSTF's DNA since its establishment in 1996. Recent examples of our commitment to transformative I&T include support for hydrogen fuel initiatives and the development of low-altitude economy in Hong Kong.

Our Regulatory Services team assisted the Environment and Ecology Bureau in drafting a bill to amend the Gas Safety Ordinance (Cap. 51), which was successfully introduced into the Legislative Council in April 2025. The Bill establishes a regulatory framework for the safe use of hydrogen as fuel, with comprehensive safety and technical requirements. Meanwhile, the EMSTF provided technical support to the Food and Environmental Hygiene Department in piloting hydrogen fuel cell street washing vehicles, promoting the use of cleaner energy in daily life.

We also began developing a framework for a green hydrogen certification scheme in Hong Kong. Leveraging our technical expertise and strong ties with international and Chinese standardisation bodies, the Electrical and Mechanical Services Department (EMSD) is uniquely positioned to help shape standards that align with local, Chinese Mainland (Mainland), regional and global markets. This initiative holds great potential for decarbonisation and the growth of Hong Kong's green finance industry.

To advance the low-altitude economy highlighted in the 2024 Policy Address, we collaborated with the Fire Services Department to modify the microwave links of its Terrestrial Trunked Radio communications system. The transition to a frequency band newly assigned by the Office of the Communications Authority will free up spectrum for emerging low-altitude applications such as drone-based emergency rescue, infrastructure inspection, parcel delivery and sky taxi service.

聚焦推動新技術

營運基金已鎖定三項最具潛力、能為客戶和機電業界創造巨大價值的技術作為重點發展策略，包括人工智能、「機電裝備合成法」和開放式建築信息模擬(open BIM)。我們正加快發展這些技術，並與客戶合作，推廣在更多場地應用。

為滿足客戶對人工智能方案日益殷切的需求，我們已在14個客戶場地安裝由營運基金自主研發、屢獲殊榮的「ChillStream®」人工智能製冷機組優化系統。我們首個人工智能空氣處理機組優化方案，亦已在麥理浩牙科中心成功試行。這些項目展示人工智能有助政府各決策局和部門加快數碼轉型，把運作效率、自動化和節能水平提升至更高層次。

我們在機電設施安裝和更換工程中採用「機電裝備合成法」，大幅縮短施工時間，提升工程質素和安全。至今我們已完成29個「機電裝備合成法」先導項目，並計劃把該技術應用於另外69個項目。在海關總部大樓和宏昌大廈的項目中，「機電裝備合成法」成功減省30%至40%的安裝時間和施工日數。

為了向業界推廣「機電裝備合成法」，我們於2024年11月舉辦機電裝備合成法研討會，並於2025年發布《機電裝備合成法維修、保養、改建和加建項目工程指南》。

另一個令人振奮的發展領域是open BIM，利用開放資料格式，讓不同的建築信息模擬軟件和工程團隊之間無縫互通，降低對單一品牌的依賴風險。機電署開發了一套工具，簡化open BIM格式轉換流程，並在香港首個且規模最大的公共buildingSMART數據詞典中，分享我們對各類機電資產信息的要求和豐富經驗。業界進行open BIM格式轉換時，可從該網上平台找到有用的參考資料，驗證所提交的open BIM模型是否符合機電署標準。

營運基金團隊的努力，讓我們去年10月在摩洛哥舉行的全球「openBIM Awards 2024」中榮獲「項目交付組別」大獎，並在「2024年香港開放式建築信息模擬/開放式地理信息系統比賽」中奪得「技術解決方案組別」大獎，充分肯定機電署在推動open BIM發展方面的重大貢獻。

NEW PRIORITIES TO SPUR TECHNOLOGY DEVELOPMENT

The EMSTF has identified three strategic priorities with strong potential to deliver significant value to clients and the E&M sector, namely artificial intelligence (AI), Multi-trade integrated Mechanical, Electrical and Plumbing (MiMEP), and open Building Information Modelling (open BIM). We are expediting the development of these technologies and working with clients to scale up their implementation at more venues.

To meet the growing demand for AI applications, we have deployed our award-winning, in-house-developed ChillStream® AI-based chiller optimisation solution at 14 client venues, while our first AI-based Air-side Equipment Optimisation solution was successfully piloted at the MacLehose Dental Centre. These projects have demonstrated how AI can accelerate digitalisation across government bureaux and departments and take their operations to new levels of efficiency, automation and energy saving.

MiMEP has been adopted for installation and replacement of E&M facilities, significantly shortening project timelines while improving works quality and safety. To date, we have completed 29 MiMEP pilot projects, with plans to apply the technology to 69 additional projects. This method has achieved a 30% to 40% reduction in installation time and workdays for projects at the Customs Headquarters Building and Wang Cheong Building.

To promote MiMEP to the trade, we hosted the MiMEP Symposium in November 2024 and released the Engineering Guidelines on MiMEP for Repair, Maintenance, Alteration and Addition Projects in 2025.

Another exciting development area is open BIM. By using open data formats, open BIM enables seamless interoperability between different BIM software and engineering teams to reduce brand dependence risks. The EMSD has developed tools to simplify open BIM conversion and shared our requirements and rich experience on various E&M asset information in Hong Kong's first and largest public buildingSMART Data Dictionary. The trade can find useful references from this online resource as they perform open BIM conversions and verify if their submitted open BIM models meet EMSD standards.

Thanks to the team's efforts, we won the Grand Award (Handover category) at the global openBIM Awards 2024 in Morocco in October last year, and the Technology Solution Grand Award at the Hong Kong openBIM/open GIS Awards 2024, both recognising our significant contribution to open BIM development.

走在問題前 防患於未然

我們致力培養預防事故的文化，持續優化相關系統和機制。事實上，每一次緊急情況或簡單錯誤，往往揭示背後更深層的問題，值得我們反思與學習。近年超強颱風和特大暴雨頻繁出現，促使我們與客戶加強合作，提升機電資產的保護措施。

機電署的「資產管理網站」是應對極端天氣的重要工具。這個企業級別網上平台整合多個本地控制中心，並透過實時物聯網系統，遙距管理、監察和優化主要關鍵機電資產的營運效率和環保表現。「資產管理網站」具備數據分析和診斷功能，可及早偵測故障並介入處理，協助客戶避免服務中斷。

為保障客戶的關鍵機電資產，我們在惡劣天氣來臨前，預先部署各種水浸監測和防護系統。例如，智能水浸偵測及預警系統能針對行人隧道發出水浸警報，提升公眾安全。該系統成效卓越，將會擴展至三條主要道路，加強水浸監測和應變能力。我們還採取額外措施，包括全面檢查各種設施、測試備用設備和提供現場緊急支援。在極端天氣期間，機電署會啟動緊急事故控制中心，監察交通燈、街燈和隧道設施等重要基礎設施，確保公共服務穩定運作。

吸引年輕新血 培育人才

機電署持續透過一系列多元外展活動，包括學校及社區講座、工作坊和比賽，向年青人推廣創科、數碼化和節能減碳理念，鼓勵他們投身機電工程事業。在2024/25年度，我們與灣仔民政事務處合辦「建『機』灣仔－青少年社區設施優化計劃」，邀請來自12間學校共170名學生參與多元化活動，包括以科技提升市民生活質素的社區建設比賽，加深他們對機電安全、能源效益、節能減碳和創科的認識。

「建『機』灣仔」計劃亮點之一為2024年10月舉行的粵港澳大灣區創科考察團。活動獲廣東省科學技術協會支持，一行約40名師生參觀廣東東莞多個創科設施，了解機械人、新能源、生命科學和材料科學等產業。這項計劃成效顯著，我們會研究把它擴展至其他地區。

STAYING AHEAD OF PROBLEMS TO PREVENT INCIDENTS

We are committed to fostering a culture of incident prevention and continuously improving our relevant systems and mechanisms. Indeed, every emergency or minor error often sheds light on deeper underlying issues that warrant reflection and learning. In recent years, the increasing frequency of super typhoons and severe rainstorms, for example, has prompted us to work more closely with clients to strengthen protective measures for their E&M assets.

A powerful tool in this effort is the EMSD Asset Management Portal, our corporate-level digital portal that integrates multiple local control centres. Through a real-time Internet of Things system, the Portal enables remote management, monitoring and optimisation of the operational efficiency and environmental performance of major critical E&M assets. Equipped with data analytics and diagnosis capabilities, the Portal supports early fault detection and intervention, helping clients avoid service disruptions.

To safeguard clients' critical E&M assets, we installed flood monitoring and prevention systems well ahead of severe weather, such as the Smart Flood Detection and Warning System that enhances public safety by alerting people to flood risk at pedestrian subways. Given its proven effectiveness, the system will be extended to three critical roads to enhance flood monitoring and response. Additional measures included thorough inspections, testing of backup equipment, and on-site emergency support. During extreme weather events, the EMSD Emergency Control Centre will be activated to monitor essential infrastructure, including traffic lights, streetlights, and tunnel installations, ensuring stable operation of public services.

ATTRACTING YOUTH, NURTURING TALENTS

The EMSD continues to inspire young people to pursue careers in E&M engineering by promoting interest in I&T, digitalisation and decarbonisation through a rich array of outreach activities including school and community talks, workshops and competitions. In 2024/25, we launched the "Engineering Opportunities for Wan Chai – Youth Community Facilities Enhancement Programme" in collaboration with the Wan Chai District Office, engaging 170 students from 12 schools in diverse activities. These included a community building competition using technology to improve people's quality of life, deepening students' understanding of E&M safety, energy efficiency, decarbonisation and I&T.

A highlight of the programme was a Greater Bay Area (GBA) I&T study tour in October 2024, supported by the Guangdong Association for Science and Technology. Around 40 students and teachers visited various I&T facilities in Dongguan, Guangdong, exploring industries such as robotics, new energy, life sciences and materials science. We will explore the possibility of expanding this successful programme to other districts.

機電署與大灣區機構建立合作伙伴關係，為員工提供寶貴的培訓機會。透過與廣州市人力資源和社會保障局簽署的兩份合作備忘錄，機電署員工得以在廣州多間技術員培訓學院接受專業訓練。單在2024年，已有68名見習技術員在廣州接受多個領域的培訓，涵蓋空調製冷、電氣工程、屋宇裝備和車輛維修保養。

值得一提的是，廣州合作伙伴一直為備戰世界技能大賽的機電署年輕見習技術員提供頂尖訓練和悉心指導。繼2024年兩位見習技術員代表香港到法國里昂參賽後，我們正積極籌備參加2026年在上海舉行的賽事，期望憑藉主場優勢，爭取佳績。

通力協作 發揮超級聯繫人角色

另一項令人期待的盛事，是將於2025年11月舉行的第十五屆全國運動會（全運會），由廣東、香港和澳門三地共同承辦，亦是香港首次承辦全運會賽事。我們的籌備工作包括提升康樂及文化事務署場地的技術系統和設備、確保政府場地的電力供應穩定、改善照明設施，並參與各項綵排和模擬賽。

全運會也為我們帶來契機，於2024年11月舉辦為期三天的深圳和廣州考察團。營運基金代表參觀兩地多個體育館和表演場地，包括全運會指定比賽場地，深入了解場所採用的先進技術。這是我們首次與大灣區進行類似交流，所得經驗對全運會工作以至未來項目均具重要參考價值。

年內，機電署與國家市場監督管理總局（市場監管總局）簽署諒解備忘錄，加強與內地的合作，並鞏固我們在香港融入國家發展策略中的角色，其中一例是參與草擬綠色氫能國家標準。透過與市場監管總局合作，機電署有機會參與標準草擬過程，貢獻國際經驗，充分發揮「超級聯繫人」的角色。營運基金同事在氫燃料電池汽車試驗及其他氫能試驗項目中為客戶提供技術支援的經驗，亦具寶貴參考價值。

此外，我們與大灣區機構合作制訂統一標準，包括最近完成的《機電設備人工智能數據標準化指南》，並已在廣州一個先進建築項目中成功試行。

Our partnerships with GBA institutions also provide valuable training opportunities. Through two Memoranda of Co-operation signed with the Guangzhou Municipal Human Resources and Social Security Bureau, many EMSD staff have received specialised training in various technician training colleges in Guangzhou. In 2024 alone, 68 Technician Trainees (TTs) were trained in Guangzhou in diverse fields including refrigeration, air-conditioning and electrical engineering, building services and vehicle maintenance.

Notably, our Guangzhou partner has been providing top-notch training and generous coaching to our young TTs preparing for the WorldSkills Competition. Following our two TTs' participation in WorldSkills Lyon, France in 2024, we are actively gearing up for the WorldSkills Shanghai in 2026, where we are aiming for victories with the advantage of competing on our home ground.

COLLABORATIONS AND SUPER CONNECTOR

Another exciting mega event on our homeland is the upcoming 15th National Games, co-hosted by Guangdong, Hong Kong and Macao in November 2025. This marks Hong Kong's first time hosting National Games competitions. Our preparations include upgrading technical systems and equipment at the venues of the Leisure and Cultural Services Department, ensuring reliable power supply and enhancing lighting facilities at government venues, and taking part in rehearsals and event simulations.

The National Games also presented a valuable opportunity to organise a three-day study mission to Shenzhen and Guangzhou in November 2024. The EMSTF delegates explored advanced technologies used in sports and performance venues in the two cities, including several designated National Games competition sites. This was our first exchange of its kind with the GBA, and the experience gained will be instrumental to the National Games and future projects.

During the year, the EMSD strengthened Mainland collaboration by signing a Memorandum of Understanding with the State Administration for Market Regulation (SAMR), reinforcing our role in Hong Kong's integration into national development strategies. A prime example is our involvement in the drafting of green hydrogen national standards, where the collaboration with SAMR enables us to participate in the drafting process and contribute our international experience, fully embracing our role as a "Super Connector". Experience from our EMSTF colleagues in providing technical support for clients on hydrogen fuel cell vehicle trials and other hydrogen pilot projects will also be highly relevant and valuable.

We also collaborated with GBA entities to develop harmonised standards, including the recently completed E&M AI Data Standardisation Guideline, which was successfully piloted during the construction of a state-of-the-art building in Guangzhou.

2035－2050願景研究成形

我欣然報告，機電署的2035－2050願景研究進展順利。這項研究旨在預測從現在至2050年間，影響香港以至全球的宏觀變化，例如科技發展和地緣政治格局轉變，並評估機電署的優勢，制訂短期、中期和長期發展情景，為我們制訂未來的願景、目標、策略和行動提供指引。

過去一年，我們的研究團隊努力不懈，匯集跨部別的專業知識，並與營運基金和規管服務的管理層和各級同事交流，收集意見和建議。雖然相關策略路線圖仍待敲定，但核心主題已明確：機電署必須維持在機電業界的領導地位，同時審視和調整未來數十年角色定位。

研究分析了七個關鍵領域，即地緣政治環境、融入國家發展、城市基建設施、能源、生活方式、工作模式和勞動力結構，從中識別出重要挑戰和新興機遇。初步結果顯示，人工智能和機械人技術的迅速發展，將徹底革新機電操作和維修保養模式－由例行檢查轉型為預測性維修保養，由單一部件更換轉向智能綠色改造。

面對香港人口急速老化，加上財政資源壓力，我們必須加快改革勞動力結構和服務提供模式。同時，內地信息技術應用創新產業的崛起，亦為機電署帶來長遠發展機遇。

下一步，我們會着手制訂策略和行動路線圖。首要工作包括推行人工智能、機械人技術和大數據方面的技能提升計劃，培育韌性十足的員工團隊；建立靈活高效的組織架構；以及把內地機電工程的卓越成果推向國際舞台。我們的團隊會繼續全力以赴，迎接未來挑戰。

致謝與感恩

2026年是營運基金成立30周年的重要里程碑，提醒我們堅守初心，持續推動創新與轉型，為客戶和社會提供更高效、更優質的服務。2035－2050願景研究將引領我們繼續前行，恪守使命。

我們衷心感謝所有客戶、機電業界、專業團體、學術界和培訓與研究機構多年來的支持與信任，也感謝內地與海外伙伴的緊密合作與支援，讓我們不斷進步。

2035-2050 VISION STUDY SHAPING UP

I am pleased to report that the EMSD 2035-2050 Vision Study is progressing well. The study aims to anticipate macro-level changes such as technological advancements and geopolitical shifts impacting Hong Kong and the world between now and 2050, assess our strengths, and develop short-, medium-, and long-term development scenarios. These will inform and guide our future vision, goals, strategies and actions.

Throughout the year, our dedicated team worked tirelessly, drawing on cross-divisional expertise and engaging with management and staff from both the EMSTF and Regulatory Services to gather insights and recommendations. While the strategic roadmap is still in development, the core theme is clear: the EMSD must continue to lead in E&M excellence while re-evaluating and redefining our role for the decades ahead.

The study has analysed seven key areas, namely geopolitical context, national integration, urban infrastructure, energy, lifestyle, work models, and workforce structure, from which we identify critical challenges and emerging opportunities. Preliminary findings suggest that rapid advancements in AI and robotics will fundamentally transform E&M operations and maintenance, shifting from routine inspections to predictive maintenance, and from single-component replacements to smart, green retrofits.

Hong Kong's rapid ageing population and fiscal constraints also prompt urgent transformation in our workforce structure and service delivery models. At the same time, the rise of the Information Technology Application Innovation industry on the Mainland presents long-term growth opportunities for the EMSD.

Our next steps are to start formulating strategies and an action roadmap. Key priorities will include building a resilient workforce through upskilling programmes in AI, robotics, and big data, creating an agile organisational structure, and showcasing the Mainland's E&M excellence on the global stage. Our team remains fully committed to meeting future challenges head-on.

MESSAGE OF THANKS AND GRATITUDE

The year 2026 marks the 30th anniversary of the EMSTF, a significant milestone that reminds us to stay true to our founding purpose: to drive innovation and transformation for more efficient, higher-quality services to clients and the community. The 2035-2050 Vision Study will guide us forward as we remain steadfast in our purpose.

We extend sincere thanks to all our clients, the E&M trade, professional bodies, academics, and training and research institutions for their enduring support and trust over the years. We are equally grateful to our Mainland and overseas partners for their collaboration and support to our ongoing progress.

對於各決策局的指導、各政府部門通力合作，以及全體同事的敬業精神與卓越表現，我們深表謝意。我們亦十分重視立法會議員、傳媒、意見領袖和市民的監察與回饋，感謝他們為營運基金持續改進作出貢獻。

憑藉大家的支持，我們深信營運基金來年定能更上一層樓，再創高峯，為香港和市民締造更美好的未來。

Our heartfelt appreciation also goes to the policy bureaux for their guidance, government departments for their co-operation, and all our colleagues for their dedication and outstanding work. We value the vigilance and feedback from Legislative Council members, the media, opinion leaders, and the public, all of whom contribute to our continuous improvement.

With your unwavering support, we are confident that the EMSTF will reach new heights in the coming year, achieving even greater success and helping build a brighter future for Hong Kong and its people.

潘國英
機電工程營運基金總經理

Poon Kwok-ying, Raymond
General Manager, Electrical and Mechanical Services Trading Fund

業務回顧與前瞻 OPERATIONS REVIEW AND OUTLOOK

周厚強太平紳士
Mr Chow Hau-keung,
Vincent, JP

機電工程署副署長/營運服務
Deputy Director/Trading Services,
EMSD



穩健增長 策略聚焦

2024/25年度，機電工程營運基金（營運基金）繼續錄得穩健增長，總收入增至98.33億港元，較上年度上升6%。收入回報率微升至2.4%，反映我們繼續努力秉持收回成本的營運原則，讓客戶能保留資金，為公共服務創造最大價值。

2026年是營運基金成立30周年。我們在籌備誌慶活動之際，仍專注推動機構持續發展，以滿足客戶對服務質素和價值的期望。我們所提供的卓越機電工程服務，在經濟不明朗時期尤為重要。我們預期未來業務會保持穩健發展，並會時刻保持警惕，以應對可能出現的挑戰。

維繫客戶 拓展服務

我們欣見客戶持續對營運基金的服務抱有信心，年內我們成功續簽所有服務水平協議。值得一提的是，醫院管理局已發出意向書，擬於2027年起簽訂為期十年的服務水平協議，涵蓋電氣、機械和空調服務。此舉會為我們帶來穩定收入，但我們亦需透過非公務員合約僱員計劃、退休後服務合約計劃和其他招聘渠道擴充人手，以提供所需服務。為應對日益增長的服務需求，我們會進一步採用人工智能等創新科技（創科），把操作與維修保養工作自動化，提升效率。

營運基金的2024年客戶意見調查肯定了我們以客為本的服務方針，客戶滿意指數和整體服務競爭力指數分別達7.27分和7.38分（滿分為8分），兩者均創歷史新高，而問卷回應率也高達64%。調查所得的寶貴意見和建議，有助我們持續改進。

STEADY GROWTH AND STRATEGIC FOCUS

In 2024/25, the Electrical and Mechanical Services Trading Fund (EMSTF) experienced another year of steady growth, with total revenue rising to HK\$9,833 million, a 6% increase from the previous year. The return on revenue increased slightly to 2.4%, reflecting our continued effort to adhere to the cost-recovery principle while enabling clients to retain funding for their public services.

The year 2026 marks the 30th anniversary of the EMSTF. As we prepare for the celebrations, our focus remains on continuously evolving to meet client expectations for service quality and value. Our excellent engineering services have proven indispensable amid economic uncertainties, and we anticipate stable development while remaining vigilant at all times against potential headwinds.

CLIENT ENGAGEMENT AND SERVICE EXPANSION

We are delighted to report continued client confidence, with all Service Level Agreements (SLAs) successfully renewed in 2024/25. Notably, the Hospital Authority has issued a letter of intent to enter into a ten-year SLA starting in 2027, covering electrical, mechanical and air-conditioning services. This will enhance revenue stability, but necessitate workforce expansion for service delivery through the Non-Civil Service Contract Staff Scheme, the Post-retirement Service Contract Scheme and other recruitment channels. To meet growing service demands, we will further embrace innovation and technology (I&T), including artificial intelligence (AI), to automate operation and maintenance tasks and improve efficiency.

The EMSTF Customer Opinion Survey (COS) 2024 affirmed our client-focused approach, achieving historic highs with a Customer Satisfaction Index of 7.27 and an Overall Service Competitiveness Index of 7.38 on an eight-point scale, along with a robust response rate of 64%. The COS provides valuable insights and suggestions for our continuous improvement.

創新文化與成果

我們透過「機電創科網上平台」及其他措施推動創科發展，成功培養員工和客戶的創新文化。我們與客戶合作的創科項目屢獲國際認可，其中與民航處共同開發的「高性能電腦工作站兩相浸沒式冷卻系統」，在2025年第50屆日內瓦國際發明展榮獲日內瓦州特別大獎，屬日內瓦發明展最高榮譽之一。該獎項代表得獎項目獲政府層面的榮譽與認可，亦是首次有香港特別行政區政府部門獲此殊榮。

我們成功培養創新文化，並開展多項創科方案以進行概念驗證。未來數年，我們會聚焦整合已成功驗證的項目，訂立優先次序，並制訂實施計劃，推動在客戶場地大規模應用，以期達到節能或減省人手的目標。

優先發展的技術：機電裝備合成法、開放式建築信息模擬和人工智能

鑑於「機電裝備合成法」、開放式建築信息模擬（open BIM）和人工智能技術對客戶及機電行業具潛在價值，我們會優先發展這三種技術。

「機電裝備合成法」不但適用於新項目，亦有助加快現有建築物的維修、保養、改建和加建項目進度。年內，我們成功開展了多個「機電裝備合成法」先導項目，包括更換瑪嘉烈醫院的空氣處理機組，以及東區尤德夫人那打素醫院和海關總部大樓的製冷機組。根據所得數據，「機電裝備合成法」把工地施工日數平均縮減達六成，同時透過更換老化設備，達致節能和長遠維修保養效益。對醫院來說，縮減施工日數尤其重要，因冬季可供進行維修保養的時間有限，必須迅速完成設備更換，以減少對醫院運作的影響。越來越多維修、保養、改建和加建合約要求採用「機電裝備合成法」，促使中小型機電承辦商學習相關知識並累積實務經驗，從而提升機電行業的整體能力，加強資產管理。

另一項優先發展的技術是open BIM。儘管政府多年來一直推動建築信息模擬（BIM）技術發展，但目前尚未能實現跨平台互通。我們會運用BIM方面的專業知識，加快不同BIM軟件與持份者之間的互通，開發open BIM檢視器，並推廣open BIM標準和 workflows，以減少對品牌的

INNOVATION CULTURE AND ACHIEVEMENTS

Our efforts to facilitate I&T development via the E&M InnoPortal and other initiatives have fostered a culture of innovation among our staff and clients alike. Our collaborative I&T projects with clients have garnered international recognition, including the Two-phase Immersion Cooling System for High Performance Computer Workstation, jointly developed with the Civil Aviation Department. The project won the Prize of the Republic and Canton of Geneva, one of the top accolades at the 50th International Exhibition of Inventions of Geneva 2025. The prize represents a great honour and recognition at a government level for the winning project. This is also the first time that departments of the Hong Kong Special Administrative Region Government have received this award.

Building on our success in cultivating an innovation culture and launching various I&T projects for proof of concept, we will, in the coming years, focus on consolidating and prioritising those projects with successfully verified concepts and formulate implementation plans for large-scale deployment in client venues, with a view to achieving energy or manpower savings.

PRIORITY TECHNOLOGIES: MIMEP, OPEN BIM AND AI

We have identified Multi-trade integrated Mechanical, Electrical and Plumbing (MiMEP), open Building Information Modelling (open BIM) and AI technologies as top priorities in view of their potential value to clients and the E&M trade.

While MiMEP is useful for new projects, it is also valuable in expediting repair, maintenance, alteration and addition (RMAA) projects in existing buildings. During the year, we successfully commenced numerous MiMEP pilot projects, including the replacement of an air-handling unit at Princess Margaret Hospital, and chillers at Pamela Youde Nethersole Eastern Hospital and the Customs Headquarters Building. Based on the data obtained, MiMEP reduced the average number of on-site working days by up to 60%, while delivering energy savings and long-term maintenance benefits from replacement of ageing equipment. The significance of reduced working days is especially pronounced in hospitals, where limited winter maintenance windows demand swift equipment replacement to minimise disruption to hospital operations. More and more RMAA contracts mandating MiMEP usage will also incentivise small- and medium-sized E&M contractors to acquire MiMEP knowledge and hands-on experience, thereby elevating the E&M industry capabilities as a whole and enhancing asset management.

Another priority is open BIM. Although the Government has been driving BIM development for years, we are not yet at a stage to achieve interoperability across BIM platforms. We will utilise our BIM expertise to accelerate interoperability between different BIM software and stakeholders, develop an open BIM viewer, and promote open BIM standards and workflows, with a view to reducing the risk of brand dependence and enhancing BIM

依賴，並加強不同工程專業人員之間的BIM技術協作。我們會繼續探索在設計、施工以至資產管理等各個範疇應用open BIM的可能性。

人工智能是優先發展技術清單上不可或缺的一環。正如行政長官於2025年4月在香港舉行的世界互聯網大會亞太峰會所言，人工智能「對香港未來至關重要」。繼部門成功舉辦「國際建築機電人工智能大挑戰2025」，以及推出自主研发且屢獲獎項的「ChillStream®」人工智能製冷機組優化系統後，我們會繼續運用人工智能，協助客戶節約能源和提高效率。

我們亦觀察到市場對安全的人工智能數據儲存、人工智能項目實施和人工智能培訓的需求日益殷切。營運基金作為政府的「創新促成者」，致力滿足這些需求，在部門內建立人工智能基礎設施處理數據，並聯繫市場合作伙伴，為客戶推行人工智能項目和提供人工智能培訓服務。這將會是一項極具潛力的重要工作，我們正與相關持份者探討其可行性。

在優先發展的技術方面建立實力

為加快客戶採用實證有效的創科方案，並推動上述三大技術的發展，關鍵在於培養員工重視技術和培訓的思維，包括改革見習工程師訓練計劃和技術員訓練計劃。我們也會為各級在職員工提供適切的創科培訓，包括安排專業和技術職系人員前往大灣區的「機電裝備合成法」工廠進行技術考察，擴闊視野。相關措施還包括透過現代化工作方式，與時並進，從而提升員工的工作滿足感。

內地與國際協作

近年來，各種協作大大加快了我們在創科發展和培訓方面的步伐。我們與廣州市人力資源和社會保障局簽署兩份合作備忘錄，以推動機電培訓，正正是有效協作的典範。廣州多家機構為我們的同事提供高質素機電課程，包括為世界技能大賽作參賽準備的機電署見習技術員。隨著電動車在政府車隊中日益普及，我們會繼續擴展員工在電動車維修保養等領域的培訓機會。

collaboration among different engineering professionals. We will continue to explore various possibilities of open BIM applications on design, construction and asset management.

Our list of priority technologies would not be complete without AI. As highlighted by the Chief Executive at the World Internet Conference Asia-Pacific Summit in Hong Kong in April 2025, AI is “central to Hong Kong’s future”. Following our successful organisation of the Global AI Challenge for Building E&M Facilities 2025, and the successful launch of our award-winning in-house-developed ChillStream® AI-based chiller optimisation solution, we will continue to leverage AI to help clients save energy and boost efficiency.

We have also observed a growing market demand for secure AI data storage, AI project facilitation and AI capacity building. As the Innovation Facilitator for the Government, the EMSTF is committed to meeting these needs by establishing an on-premises AI infrastructure for data handling, and connecting market partners to provide clients with AI project facilitation and training services. This would be a major undertaking with exciting potential, and we are exploring the feasibility with relevant stakeholders.

CAPACITY BUILDING IN PRIORITY TECHNOLOGIES

To accelerate client adoption of proven I&T solutions and advance the development of the above three priority technologies, a key to success will be fostering a technology- and training-driven mindset among our staff, including reforming our Engineering Graduate and Technician Training Schemes. We will also provide suitable I&T training for our in-service staff at all ranks, including arranging technical visits for our professional and technical grade colleagues to MiMEP plants in the Greater Bay Area to broaden their exposure. A related initiative is to boost staff job satisfaction by modernising their work to keep up with the times.

MAINLAND AND INTERNATIONAL COLLABORATION

Collaboration has expedited our I&T development and training efforts in recent years. The signing of two Memoranda of Co-operation with the Guangzhou Municipal Human Resources and Social Security Bureau to promote E&M training serves as an example of effective collaboration. Various institutes in Guangzhou have provided high-quality E&M courses for our colleagues, including Technician Trainees preparing for the WorldSkills Competition. As electric vehicles (EVs) have become increasingly prevalent in the government fleet, we will continue expanding training opportunities for our staff in areas such as EV maintenance.

業務回顧與前瞻

OPERATIONS REVIEW AND OUTLOOK

2025年，我們在第50屆日內瓦國際發明展再創高峯，參展的十個發明項目共奪得12個獎項，包括日內瓦州特別大獎、兩個評審團嘉許金獎、四個金獎、一個銀獎、三個銅獎和一個最佳國際發明及創新獎。多個獲獎項目都是我們與客戶攜手研發的成果，突顯我們在創新協作方面的實力。

同年，我們亦與廣東省科學技術協會合辦大型國際賽事「國際建築機電人工智能大挑戰2025」，延續2021/22年度首屆比賽的成功經驗。2025年的賽事吸引來自全球26個地區逾200支隊伍參賽，現場參加者近500人，全球直播觀眾達三萬人次，反映全球對建築和機電行業應用人工智能的興趣與日俱增。

策略計劃、環境管理與機構管治

營運基金第三個五年策略計劃取得良好進展，接下來我們會專注推廣應用實證有效的創科方案。我們亦會鼓勵客戶把研發成果轉化為實際應用，整體目標是協助客戶採用已驗證的創科方案，提高營運效率，降低能源與人力成本。

在環保方面，我們持續支援客戶推行節能項目，協助更換老化照明和製冷系統至超節能型號，並利用人工智能和其他大數據方案提升能源效益。醫院管理局和香港警務處等擁有大量場地的部門，將受益於顯著的節能成效。

為推動新能源車輛以實現減碳，我們繼續向食物環境衛生署提供技術意見，協助該署試驗三輛零碳氫燃料電池洗街車。此外，我們正於機電署總部大樓外牆進行「太陽能發電建築」先導項目，收集數據以評估在公私營建築物廣泛應用這項技術的可行性。

誠信是我們機構管治的核心。我們一直透過定期向新入職和現職員工安排誠信簡報會，確保所有員工和承辦商都恪守法律與道德標準，維護誠信文化。

In 2025, we reached new heights at the 50th International Exhibition of Inventions of Geneva by winning a total of 12 awards for ten invention projects. These accolades include the Prize of the Republic and Canton of Geneva, two gold medals with the congratulations of jury, four gold medals, one silver medal, three bronze medals and the Best International Invention and Innovation prize. Many of the award-winning projects were co-developed inventions with our clients, underscoring the strength of our collaborative innovation.

We also organised a large-scale international event, the Global AI Challenge for Building E&M Facilities, in collaboration with the Guangdong Association for Science and Technology in 2025, building on the success of the inaugural competition in 2021/22. The 2025 event attracted over 200 teams of contestants from 26 regions across the globe, with approximately 500 in-person participants and 30 000 livestream viewers worldwide, showing the burgeoning global interest in AI applications for the construction and E&M sectors.

STRATEGIC PLAN, ENVIRONMENTAL STEWARDSHIP AND GOVERNANCE

With good progress already made, the remainder of our third Five-year Strategic Plan will focus on scaling proven I&T solutions. We will incentivise clients to translate research and development outcomes into practical applications. Our overarching goal is to help clients optimise operational efficiency and reduce energy and manpower costs by adopting proven I&T solutions.

On the environmental front, we continued to support clients' energy-saving projects, help them replace aged lighting and chiller systems with ultra-energy-efficient models and optimise energy performance using AI and other big data solutions. Client departments such as the Hospital Authority and the Hong Kong Police Force, with extensive venue portfolios, stand to benefit from substantial energy savings.

To support decarbonisation through promoting new energy vehicles, we continued to provide technical advice to the Food and Environmental Hygiene Department for its pilot trial of three carbon-neutral hydrogen fuel cell street washing vehicles. In addition, we are conducting a pilot project to install Building-Integrated Photovoltaics system on the facades of the EMSD Headquarters, with data collection in progress to assess the feasibility of broader adoption in public and private buildings.

When it comes to governance, integrity is at our core. We have been upholding integrity by providing regular integrity briefings to both new and existing staff, so as to ensure all staff and contractors adhere to laws and ethical standards.

支援2025/26年度大型活動

本港即將迎來兩項大型活動，分別是2025年11月的第十五屆全國運動會（全運會），以及2025年12月的立法會換屆選舉。

全運會由粵港澳三地聯合承辦，標誌着香港首次成為全國體育盛事的協辦城市。香港會承辦八個競賽項目和一個羣眾賽事活動。營運基金十分榮幸能協助康樂及文化事務署與其他客戶部門升級場地和監察機電設施運作，以確保各項賽事順利進行。

一如以往選舉年度，我們會為2025年12月初舉行的立法會換屆選舉提供技術支援。屆時，數以千計的員工和承辦商人員會分派至全港各個投票站和點票站，負責安裝所需的照明和機電設備，並於選舉日在現場待命，隨時提供支援。

衷心謝忱

自2024年年中出任副署長/營運服務以來，我深感榮幸能協助帶領這個靈活進取的機構，致力不斷變革，追求卓越，服務香港。謹代表全體團隊，衷心感謝常務委員會和各決策局的指導、客戶的信任、同事的無私奉獻和出色表現，以及香港、內地和海外眾多合作伙伴，包括商會、業界組織、學術界、專業團體、培訓和科研機構等的鼎力支持。

憑藉持續創新與協作，我們深信營運基金將穩步前行，並在創科發展領域開創新局面。

周厚強

周厚強
機電工程署副署長 / 營運服務

SUPPORTING MAJOR EVENTS IN 2025/26

Two upcoming major events are the 15th National Games of the People's Republic of China in November 2025 and the Legislative Council (LegCo) General Election in December 2025.

The National Games, co-hosted by Guangdong, Hong Kong and Macao, mark Hong Kong's debut as a co-host of a national sports event. Hong Kong will stage eight sports competitions and one mass participation event. The EMSTF is honoured to support the Leisure and Cultural Services Department and other clients in upgrading their venues and monitoring the operation of E&M facilities to ensure smooth running of all competitions.

As in previous election years, we will provide technical support for the 2025 LegCo General Election scheduled for early December. Thousands of our staff and contractors will be deployed to polling and counting stations throughout Hong Kong to set up the necessary lighting and E&M facilities, and to provide on-site standby support on the election day.

APPRECIATION AND THANKFULNESS

Since assuming the deputy role at the EMSTF in mid-2024, I have been privileged to help steer this agile organisation, which is committed to continuous transformation and excellence in serving Hong Kong. On behalf of the entire team, I would like to extend heartfelt thanks to the Executive Board and the policy bureaux for their guidance, to our clients for their trust, to our colleagues for their dedication and great work, and to our many collaborative partners across Hong Kong, the Mainland and overseas, including trade associations, industry bodies, academia, professional bodies, training and research institutions, and more for their staunch support.

With continued innovation and collaboration, we are confident that the EMSTF will maintain steady performance while breaking new ground in I&T development.

Vincent Chow

Vincent Chow
Deputy Director/Trading Services, EMSD

營運服務 TRADING SERVICES

創科聞新天

營運基金在2024/25年度積極推動創新科技(創科)發展，重點聚焦人工智能、「機電裝備合成法」和開放式建築信息模擬(open BIM)技術。各個策略業務單位繼續開拓尖端科技應用的新領域，致力為客戶和市民提供更優質的機電服務，以實現營運基金第三個五年策略計劃提出的「機電3.0－智能機電」願景，並支持香港持續改革轉型。

繼部門成功自主研发屢獲殊榮的「ChillStream®」人工智能製冷機組優化系統後，我們再創新猷，於2025年3月舉行的機電人工智能實驗室科技講座上，推出建築機電設施人工智能代理「E&M Agent」。「E&M Agent」由機電人工智能實驗室研發，運用人工智能代理技術，推動智慧建築管理、減碳和自動化。參與科技講座的大業主、物業管理專業人士、顧問和學者，均對「E&M Agent」在提升物業維修保養效率方面的潛力大感興趣。我們下一步是進行測試並收集意見，以改善系統。此外，我們在科技講座上發布了兩份人工智能就緒建築資訊實務指南，分別針對人工智能語義模型和數據品質，協助業界實現標準化。

在機電人工智能實驗室科技講座上，機電署推出全新的建築機電設施人工智能代理「E&M Agent」。「E&M Agent」透過故障診斷和比較不同製冷機組數據等功能，提升維修保養效率。

At the E&M AI Lab Tech Talk, the EMSD introduced the E&M Agent, a new AI assistant for building E&M facilities. The E&M Agent enhances maintenance efficiency through features such as fault diagnosis and data comparison of various chillers.

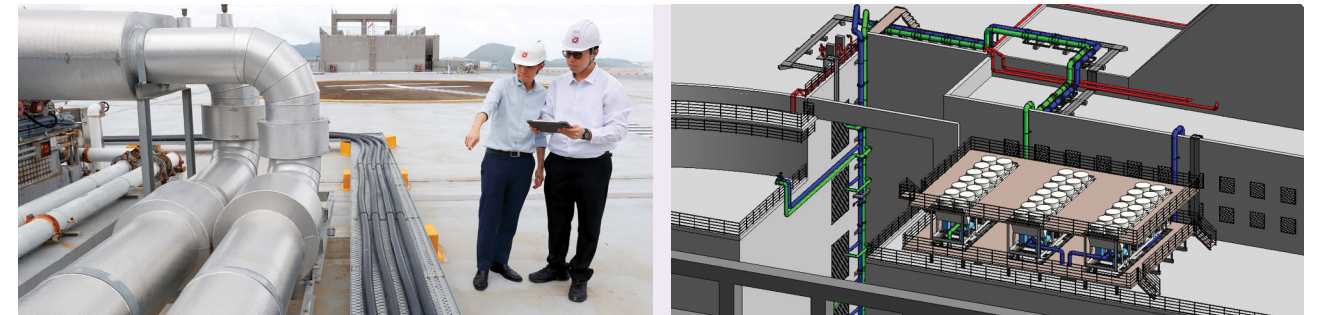
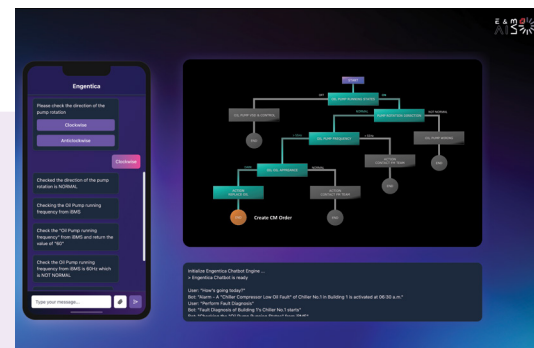


機電署於2025年3月舉辦機電人工智能實驗室科技講座，與業界人士分享語義人工智能的發展和人工智能代理的應用。
The EMSD hosted the E&M AI Lab Tech Talk in March 2025 to share the development of semantic AI and application of AI assistant with the trade.

PUSHING NEW FRONTIERS IN INNOVATION AND TECHNOLOGY

In 2024/25, the EMSTF actively advanced its innovation and technology (I&T) initiatives, with a focus on artificial intelligence (AI), Multi-trade integrated Mechanical, Electrical and Plumbing (MiMEP) and open Building Information Modelling (open BIM) technologies. Our Strategic Business Units (SBUs) continued to push new frontiers in the application of cutting-edge technologies to enhance E&M services for clients and the public, aiming to achieve the vision of “E&M 3.0 – Intelligent E&M” outlined in our third Five-year Strategic Plan and support the city's ongoing reform and transformation.

Building on the success of our award-winning, in-house-developed ChillStream® AI-based chiller optimisation solution, we introduced the E&M Agent, an AI assistant for building E&M facilities, at the E&M AI Lab Tech Talk held in March 2025. Developed under the E&M AI Lab, our E&M Agent leverages agentic AI technology to promote smart building management, decarbonisation and automation. The Tech Talk audience, including major landlords, property management professionals, consultants and academics, expressed strong interest in its potential to boost property maintenance efficiency. Our next step is to conduct trials and gather feedback for system refinement. Moreover, at the Tech Talk, two Practice Notes for AI-ready Building Informatics, respectively focus on AI semantic modelling and data quality, were released to support industry standardisation.



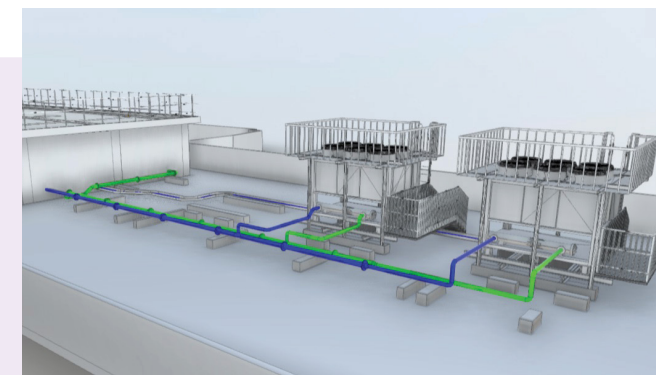
(左)機電署採用「機電裝備合成法」，協助東區尤德夫人那打素醫院更換氣冷式製冷機組，並將全新的冷水喉管系統接駁至現有手術室樓層。除了配合現場直升機坪進行熱工序的限制外，亦縮短了工地施工時間，以減少對醫院運作的影响。
(右)我們採用建築信息模擬技術製作製冷系統模型，有效提升工程品質。

(Left) By adopting the MiMEP approach, the EMSD assisted the Pamela Youde Nethersole Eastern Hospital in replacing the air-cooled chillers and connecting a new chilled water piping system to the existing operating theatre floors. This approach not only accommodated the site constraint of prohibited hot work on the existing helipad but also shortened the on-site construction time, thereby mitigating the impact on hospital operations.

(Right) Building Information Modelling (BIM) technology was adopted to develop the model of chiller system, effectively enhancing works quality.

年內，我們全面推進「機電裝備合成法」的應用。我們利用該技術，協助香港海關更換海關總部大樓老化的水冷式製冷機組，成功把安裝時間縮短30%。我們亦運用該技術為政府產業署更換深水埗宏昌大廈的製冷機組和泵房設施，不但減少施工日數約40%，更為日後的維修保養工作帶來長遠效益。此外，瑪嘉烈醫院的空氣處理機組更換工程和東區尤德夫人那打素醫院的氣冷式製冷機組更換工程也採用了「機電裝備合成法」，分別縮短施工期達40%及60%，並提升工程品質。

MiMEP deployment was in full swing during the year. Using the MiMEP technology, we assisted the Customs and Excise Department in replacing an aged, water-cooled chiller at the Customs Headquarters Building, achieving a 30% reduction in installation time. The technology was also applied to the chiller and pump room replacement at Wang Cheong Building in Sham Shui Po for the Government Property Agency, reducing the number of working days by about 40% and delivering long-term benefits for future maintenance. In addition, MiMEP method was also adopted for the replacement of the air-handling unit at Princess Margaret Hospital and the air-cooled chillers at Pamela Youde Nethersole Eastern Hospital, effectively shortening construction time by 40% and 60% respectively and enhancing works quality.



機電署運用建築信息模擬技術及「機電裝備合成法」為宏昌大廈安裝先進的新型製冷機組。這些技術簡化了施工程序，並縮減施工日數，提升工程效率。與傳統型號相比，新型製冷機組的能源效益較高。

(右上)製冷機組的建築信息模擬模型。

The EMSD installed an advanced new chiller at Wang Cheong Building using BIM and the MiMEP technologies. This approach streamlined the construction process, reducing the number of working days and enhancing work efficiency. The new chiller has higher energy efficiency as compared with the traditional model.

(Top right) The BIM model of chiller.

營運服務

TRADING SERVICES



機電署去年6月在「2024年香港開放式建築信息模擬/開放式地理信息系統比賽」奪得「技術解決方案組別」大獎，並於10月再獲「openBIM Awards 2024」的「項目交付組別」大獎，印證部門在發展及應用open BIM技術方面的努力和貢獻。

The EMSD won the Grand Award in the Technology Solution Category of the Hong Kong openBIM/openGIS Awards 2024 in June, and further received the Grand Award in the Handover Category of the openBIM Awards 2024 in October last year. These awards demonstrate the Department's efforts and contributions to the development and application of open BIM technologies.



另外，我們持續推動open BIM技術的廣泛應用，避免出現品牌依賴與壟斷情況。我們就操作和維修服務項目交付工作應用open BIM技術進行可行性研究，相關方案去年10月在buildingSMART International於摩洛哥舉辦的全球「openBIM Awards 2024」比賽中榮獲「項目交付組別」大獎，並在「2024年香港開放式建築信息模擬/開放式地理信息系統比賽」奪得「技術解決方案組別」大獎。這兩項殊榮充分印證我們在推動open BIM技術發展方面的重大貢獻。

Furthermore, we continued to promote wider adoption of open BIM to avoid brand dependence and monopolies. Our solution from the feasibility study on applying open BIM to project handover in operation and maintenance services won the Grand Award in the Handover Category of the global openBIM Awards 2024 hosted by buildingSMART International in Morocco last October, and the Grand Award in the Technology Solution Category of the Hong Kong openBIM/openGIS Awards 2024. Both awards testify to our significant contribution to open BIM development.

新機遇

營運基金的創科實力，讓我們得以支持香港進一步發展和轉型。為促進在《行政長官2024年施政報告》中強調的低空經濟，我們協助消防處修改其地面數碼集群無線電系統的微波連接網絡，改用通訊事務管理局辦公室編配的新頻帶。現時系統在全港山頂網絡站點所使用的頻帶，會重新分配給低空經濟活動和具潛力的應用項目，例如無人機緊急救援、基建設施巡查、包裹派遞和空中的士等。這些新興機遇讓我們能與內地及海外企業進一步合作，推動創新和發展。

主要創科獎項

我們的創科項目在2024/25年度榮獲多個獎項，最近在第50屆日內瓦國際發明展（日內瓦發明展）上，十個項目奪得共12個獎項。其中，我們與民航處合作研發的「高性能電腦工作站兩相浸沒式冷卻系統」，更榮獲日內瓦州政府頒發日內瓦州特別大獎，是首次有香港特別行政區政府部門獲得該項殊榮。

New Opportunities

The EMSTF's I&T capabilities position us to support Hong Kong's further development and transformation. To boost the low-altitude economy highlighted in the Chief Executive's 2024 Policy Address, we helped the Fire Services Department modify the microwave link network of its Terrestrial Trunked Radio System to operate on a new frequency band assigned by the Office of the Communications Authority. The current frequency band, used by the system's network stations on hilltop sites across Hong Kong, will be reallocated to support low-altitude economic activities and potential applications such as drone emergency rescue, infrastructure inspection, parcel delivery and air taxis. These emerging opportunities enable us to deepen collaboration with Mainland and overseas entities to drive innovation and growth.

Major I&T Awards

Our I&T projects garnered multiple international awards in 2024/25, with ten projects winning 12 awards at the 50th International Exhibition of Inventions of Geneva (Geneva Exhibition) most recently. Among these, our Two-phase Immersion Cooling System for High Performance Computer Workstation, a joint project with the Civil Aviation Department (CAD), received the Prize of the Republic and Canton of Geneva from the Government of the Canton of Geneva. This marked the first time Hong Kong Special Administrative Region Government departments receiving such an honour.



在第50屆日內瓦國際發明展上，機電署再創佳績，十個創科項目共獲12項殊榮，包括日內瓦州特別大獎、兩個評審團嘉許金獎、四個金獎、一個銀獎、三個銅獎和最佳國際發明及創新獎。

At the 50th International Exhibition of Inventions of Geneva, the EMSD reached new heights, winning 12 awards for ten I&T projects. The prestigious accolades included the Prize of the Republic and Canton of Geneva, two gold medals with the congratulations of jury, four gold medals, one silver medal, three bronze medals and the Best International Invention & Innovation prize.

其餘11個獎項為兩個評審團嘉許金獎、四個金獎、一個銀獎、三個銅獎，以及由泰國國家研究評議會頒發的最佳國際發明及創新獎。

The other 11 awards included two gold medals with the congratulations of jury, four gold medals, one silver medal and three bronze medals, and the Best International Invention & Innovation awarded by the National Research Council of Thailand (NRCT).

在日內瓦發明展上獲獎的客戶項目，包括我們支援發展局研發、用於遙控監督和管理工地的「智眼」，贏得泰國國家研究評議會獎項及銀獎。我們與民航處共同開發的「用於戶外活動的安全定位系統」，有助找出在偏遠地區遇險的滑翔傘運動員的位置以進行救援，榮獲評審團嘉許金獎。此外，我們與香港警務處（警務處）合作研發的「無人機智能眼鏡系統」獲頒銅獎。這些獎項延續了我們在2024年第49屆日內瓦發明展獲得七個金獎、十個銀獎和四個銅獎的佳績。

Client projects laurelled at the Geneva Exhibition included SmartEye developed by the Development Bureau with our support for remote site supervision and management, which received the award from the NRCT and a silver medal. The Tracking Solution for Outdoor Activity Safety, jointly developed with the CAD to help locate and rescue paragliders in distress in remote areas, won a gold medal with the congratulations of jury. Additionally, the AI Visual Intelligence-enabled Glasses for Drone Operations, jointly developed with the Hong Kong Police Force (HKPF), got a bronze medal. These accolades carried on our success at the 49th Geneva Exhibition in 2024, where we secured seven gold, ten silver and four bronze medals.



機電署與民航處合作研發的「高性能電腦工作站兩相浸沒式冷卻系統」，能提高設備的散熱效率並延長其使用壽命，項目獲得日內瓦州特別大獎殊榮。

Jointly developed by the EMSD and the CAD, the Two-phase Immersion Cooling System for High Performance Computer Workstation enhances the heat dissipation efficiency and extends the lifespan of equipment. This project received the distinguished Prize of the Republic and Canton of Geneva.



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在區域層面，我們的「ChillStream®」項目在文萊舉行的2024亞太資訊及通訊科技大獎的人工智能類別中榮獲亞軍；「協助視察及救援工作的球型機器人」則在公營機構及政府類別中獲得季軍。

同樣在亞洲，我們的「監控現場設備的無線連接系統」和在公眾洗手間的「AI智節能抽風系統」項目於2024年第四屆亞洲創新發明展覽會—香港上各贏得一項金獎。「ChillStream®」項目和垃圾收集設施監察系統都榮獲銀獎；哺乳室預約系統則奪得銅獎。

本地方面，「ChillStream®」項目在2024香港資訊及通訊科技獎勇奪最佳人工智能應用獎和商業方案(新興技術)組別金獎；「智能電容器醫生」和「協助視察及救援工作的球型機器人」均贏得銀獎。

Regionally, our ChillStream® project was First Runner-up in the AI category of the Asia Pacific Information and Communications Technology Alliance (APICTA) Awards 2024 held in Brunei, while our Ball Type Rolling Robot for Inspection and Rescue was Second Runner-up in the Public Sector and Government category.

Also in Asia, our projects of Wireless Connection to Field Equipment for Control and Monitoring and AI-Control System for Ventilation System at Public Toilet each won a gold medal at the 4th Asia Exhibition of Innovations and Inventions Hong Kong in 2024. The ChillStream® project and the Refuse Bin Monitoring System both earned silver medals, while the Mama-room Booking System received a bronze medal.

Locally, the ChillStream® project won the Best Use of AI and the Gold Award in the Smart Business (Emerging Technologies) category at the Hong Kong Information and Communications Technology (HKICT) Awards 2024. Our Smart Capacitor Bank Health Doctor and the Ball Type Rolling Robot for Inspection and Rescue each won a silver award.



「ChillStream®」和「球型機器人」項目在2024亞太資訊及通訊科技大獎中分別獲得亞軍(人工智能類別)和季軍(公營機構及政府類別—政府及市民服務)。
The ChillStream® and the Ball Type Rolling Robot were First Runner-up in the AI category and Second Runner-up in the Public Sector and Government category – Government & Citizen Services respectively at the APICTA Awards 2024.

推動成熟方案落地

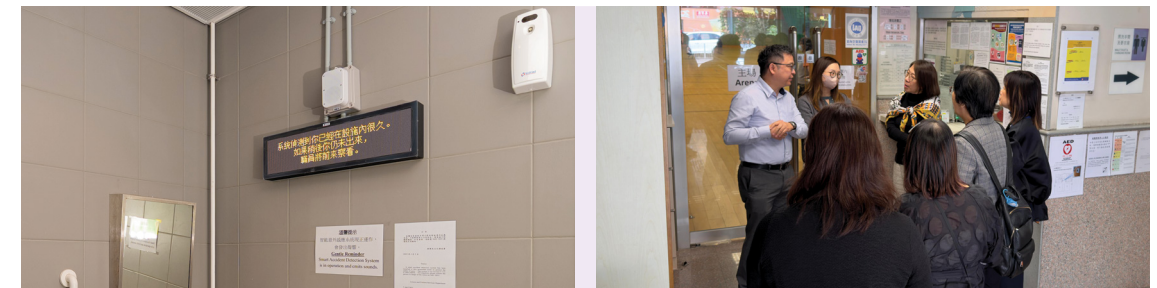
我們的策略業務單位正積極在更多政府場地推展經實證有效的創科方案，造福市民。

其中一個例子是智能意外感應系統，已在康樂及文化事務署(康文署)轄下的暢通易達洗手間成功試用。該系統運用光學雷達傳感器偵測跌倒情況，並能即時發出警報，目前已安裝於29個康文署場地，並計劃於2025/26年度擴展至全港另外30多個康文署場地，以提升場地管理和緊急應變能力。

Wider Deployment of Trialied Projects

Our SBUs are proactively expanding the deployment of proven I&T projects across more government venues to benefit the public.

A case in point is the Intelligent Fall Detection System successfully trialied in accessible toilets under the Leisure and Cultural Services Department (LCSD). Using Light Detection and Ranging (LiDAR) sensors to detect falls and trigger immediate alerts, the system has already been installed at 29 LCSD venues, with plans to extend to 30 additional venues throughout Hong Kong in 2025/26 to enhance venue management and emergency response capabilities.



(左)今年，我們陸續為康文署轄下多個康體場地安裝智能意外感應系統，並加設語音辨識求助功能及顯示屏，有助偵測可能發生的意外，並在出現異常情況時即時通知值班人員。
(右)康文署助理署長(康樂事務)1 馮妙玲女士(後排左三)與機電署代表到訪長沙灣體育館。
(Left) We continued to install the Intelligent Fall Detection System in multiple LCSD recreation and sports venues this year. Enhanced with voice recognition and display screens, the system helps detect potential accidents, and promptly alerts duty personnel in case of anomalies.
(Right) Ms Fung Miu-ling, Assistant Director (Leisure Services)1 of the LCSD (3rd left, back row), visited Cheung Sha Wan Sports Centre with EMSD representatives.

另一項方案是無線射頻辨識舞台燈光管理系統，運用物聯網技術，更有效管理、盤點和維修保養舞台燈光。該系統已在香港文化中心和油麻地戲院投入使用。

Another initiative is the Radio Frequency Identification Stage Lighting Management System, which leverages Internet of Things (IoT) technology for more effective management, stocktaking and maintenance of stage lighting. It has been implemented at the Hong Kong Cultural Centre and the Yau Ma Tei Theatre.

在公眾洗手間的「AI智節能抽風系統」曾獲多個獎項，目前正於食物環境衛生署(食環署)轄下五個公眾洗手間進行測試，並將擴展至更多場地。系統結合人工智能和物聯網傳感器，監測室內空氣質素、人流和地面積水情況，自動調節風扇速度，以改善室內空氣質素並提升能源效益。系統還可應用於其他配備機械通風的場所(例如停車場)，具有廣泛的應用潛力。

The award-winning AI-Control System for Ventilation System at Public Toilet, currently under trial in five public toilets managed by the Food and Environmental Hygiene Department (FEHD), is also set for wider rollout. By integrating AI with IoT sensors, the system monitors indoor air quality (IAQ), visitor flow and wet floor conditions, automatically adjusting fan speed to improve IAQ and optimise energy efficiency. Its design is adaptable to other mechanically ventilated spaces such as car parks, broadening its potential applications.



在第四屆亞洲創新發明展覽會—香港上，機電署以在公眾洗手間的「AI智節能抽風系統」和「監控現場設備的無線連接系統」奪得兩項金獎，並以其他項目取得兩項銀獎和一項銅獎。

At the 4th Asia Exhibition of Innovations and Inventions Hong Kong, the EMSD took two gold medals for its AI-Control System for Ventilation System at Public Toilet and Wireless Connection to Field Equipment for Control and Monitoring, and two silver medals and one bronze medal for other projects.

同時，我們將會協助食環署在所有政府火葬場全面推行火化流程智能管理系統。這個數碼化和無紙化的工作流程系統，能實時監察、有效編排和管理火化爐的使用情況。

Meanwhile, we are going to support the FEHD in implementing the Cremation Queue and Smart Management System across all its government crematoria. This digitalised, paperless workflow system enables real-time monitoring, efficient scheduling and optimal cremator utilisation.

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解決人力問題

人手短缺仍是許多客戶面臨的挑戰，特別是在巡邏與檢查工作方面，促使我們積極開發更多技術解決方案，以減輕客戶負擔。例如，我們為警務處開發智慧圍網保護系統，運用人工智能執行邊境安全任務，節省巡邏人手，讓警務人員可專注處理優先事件。此外，我們正與香港中文大學合作，在和合石墳場試用無人機配備人工智能偵測非法墓地工程。無人機能自動巡察墓地，識別現場工人並核實其身上的工作許可證。

Proactive Solutions for Manpower Issues

Manpower shortages, particularly in patrolling and inspection duties, remain a challenge to many clients, prompting us to develop more technical solutions to ease the burden. For example, the Smart Fence Protection System developed for the HKPF leverages AI to perform border security tasks, reducing patrolling manpower and allowing officers to focus on priority incidents. In collaboration with the Chinese University of Hong Kong, we are trialling AI-enabled drones to detect unlawful cemetery works at Wo Hop Shek Cemetery. These drones autonomously patrol the area, identify on-site workers and verify their work permits.



機電署為警務處引入智慧圍網保護系統，以鞏固邊境安全。我們把現有的閉路電視和震動警報系統全面升級，並增設車牌識別、數據分析和緊急求助的功能。系統以人工智能進行入侵偵測，有助提高警務處運作效率。

The EMSD has introduced the Smart Fence Protection System for the HKPF to strengthen border security. The existing CCTV and vibration alert systems have been comprehensively upgraded, with new features such as licence plate recognition, data analysis and emergency assistance. Using AI for intrusion detection, the system has enhanced the operational efficiency of the HKPF.



我們與香港中文大學合作，在食環署轄下的和合石墳場試用無人機實時巡查系統，取代人手巡邏。場地職員可透過該系統進行360度全景巡查，以加強墳場保安。

In collaboration with the Chinese University of Hong Kong, we piloted the real-time drone surveillance system at the Wo Hop Shek Cemetery under the FEHD, as a replacement for manual patrols. The system enables site staff to conduct 360-degree panoramic inspections, so as to enhance the security of the premises.



為提升地底工作安全，機電署為渠務署引入四足機械人執行巡邏工作。機械人能在崎嶇不平的地形上行走，並配備攝影機和傳感器，提供實時影像、傳感器數據和有害氣體水平資料。

To enhance underground work safety, the EMSD introduced quadruped robots to assist the Drainage Services Department in patrol duties. Equipped with cameras and sensors, the robots can traverse uneven and rugged terrains while providing real-time videos, sensor data and information on hazardous gas levels.



為減輕前線街道清潔人員的體力負擔，機電署為食環署引進自動清掃機械人。機械人可透過預設路線或人手遙距操作，目前正在馬料水海濱附近試行。

To ease the physical burden on frontline street cleaning staff, the EMSD has introduced a cleaning robot for the FEHD. The robot, which can be operated via programmed routes or manual remote control, is now on trial near the Ma Liu Shui Waterfront.

工人安全同樣備受關注。我們已在小西灣運動場部署配備高壓水槍的無人機，用於清洗高空閉路電視系統的攝錄鏡頭。該無人機亦適用於清潔表演場地的舞台設施，有助減低高空作業風險。此外，我們引入四足機械人，支援渠務署轄下密閉空間設施的工程巡查工作，既可節省人手，又能提升工人安全。

Worker safety is another critical concern. We have deployed a drone equipped with a water jet for cleaning closed-circuit television (CCTV) camera lenses at height at the Siu Sai Wan Sports Ground. The drone is also ideal for cleaning stage installations in performance venues, reducing the risks associated with working at height. Likewise, quadruped robots have been introduced to support works inspection in confined spaces at Drainage Services Department facilities, enhancing both manpower efficiency and worker safety.

與此同時，我們為食環署在沙田吐露港公路沿線行人路試用自動清掃機械人，取代人手清潔街道，節省人力。我們亦研發了戶外光度測量機械人，用於評估和分析戶外公共場地的照明水平，包括行人天橋和地下行人通道，以便在必要時能夠迅速安排維修。

Meanwhile, street cleaning robots for the FEHD have been trialled along the footpath of Tolo Highway in Sha Tin to replace manual street cleaning and save manpower. We also developed an Outdoor illuminance Measuring Robot to assess and analyse illuminance level of the outdoor public lightings at pedestrian bridges and underground walkways, allowing prompt maintenance arrangements when necessary.

儘管這些技術方案尚在研發階段，我們期望未來能廣泛應用，把本港的生產力和工人安全水平提升至高點。

Although these solutions are still in development, we hope that their extensive deployment in the future will take our city to new levels of productivity and worker safety.

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引領open BIM發展 突破界限 LEADING OPEN BIM DEVELOPMENT TO BREAK BOUNDARIES

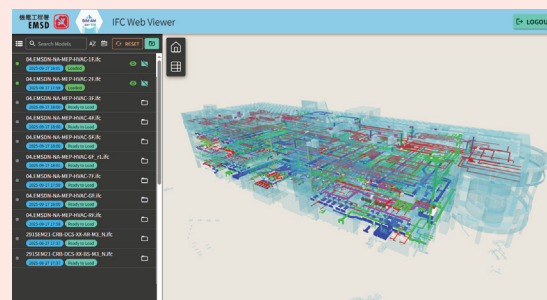
建築信息模擬(BIM)技術近年迅速發展，為進一步降低BIM的使用門檻，總工程師陳賀賢先生(右三)帶領數碼科技部深入研究開放式建築信息模擬(open BIM)的應用，開發工具簡化open BIM模型轉換程序，成果獲得國際認可。

Building Information Modelling (BIM) technology has advanced rapidly in recent years. To further lower the barriers to BIM adoption, the Digitalisation and Technology Division (DTD), led by Mr Chan Hor-yin, Steve, a chief engineer (3rd right), has taken deep dives into the application of open BIM, developing tools to streamline the open BIM model conversion process. Their achievements have garnered international recognition.

本港越來越多工程項目採用BIM技術，但市面上BIM軟件五花八門，系統間的資料互通存在困難，中小企可能需要負擔多套軟件和相關培訓成本，成為BIM普及的主要障礙。電子工程師袁彪洪先生(右二)指出：「若業界能採用軟件中立的開放格式，以統一語言溝通，將有助降低BIM的使用門檻。」

open BIM採用開放數據格式，無論工程團隊使用哪款軟件，都可參與協作。然而，在open BIM模型轉換過程中，往往出現數據流失，導致模型未能符合驗收標準，而以人工檢查錯誤亦耗時甚多。數碼科技部研發了一系列工具，專門簡化機電系統的open BIM模型轉換程序。電子工程師程元琬女士(左一)表示，團隊總結機電署多年的交付經驗，把不同機電資產的屬性要求上載至公開的buildingSMART數據詞典(本港首個且規模最大的數據詞典)，供業界參考。團隊亦編製轉換指引和開發外掛程式，協助使用者轉換open BIM模型，減少數據流失；又設計了自動核查工具，較以人手檢查open BIM模型節省九成時間。

團隊先後於本地和國際賽事獲得大獎。團隊相信，open BIM有助推動BIM軟件多元化，包括促進國產軟件的應用。團隊現正研發open BIM模型網頁檢視器和支援open BIM的「建築信息模擬－資產管理」平台，未來亦可供其他工務部門使用。



機電署正在開發高效能open BIM線上檢視器，無需安裝軟件即可快速檢視BIM模型，提供流暢優質的用戶體驗。The EMSD is now developing a high-performance open BIM web viewer, providing a smooth and nice user experience with quick loading and rendering of BIM models. It is accessible directly without requiring any software installation.

An increasing number of works projects in Hong Kong are adopting BIM technology. However, the wide array of BIM software available in the market poses challenges for data sharing between systems. Small and medium-sized enterprises may need to cover multiple software licence and related training costs, which has become a major obstacle to wider BIM adoption. Mr Yuen Piu-hung, Francis, an electronics engineer (2nd right), noted, "If the industry can use a software-neutral open format and communicate in a unified language, the entry barrier for using BIM will be lowered."

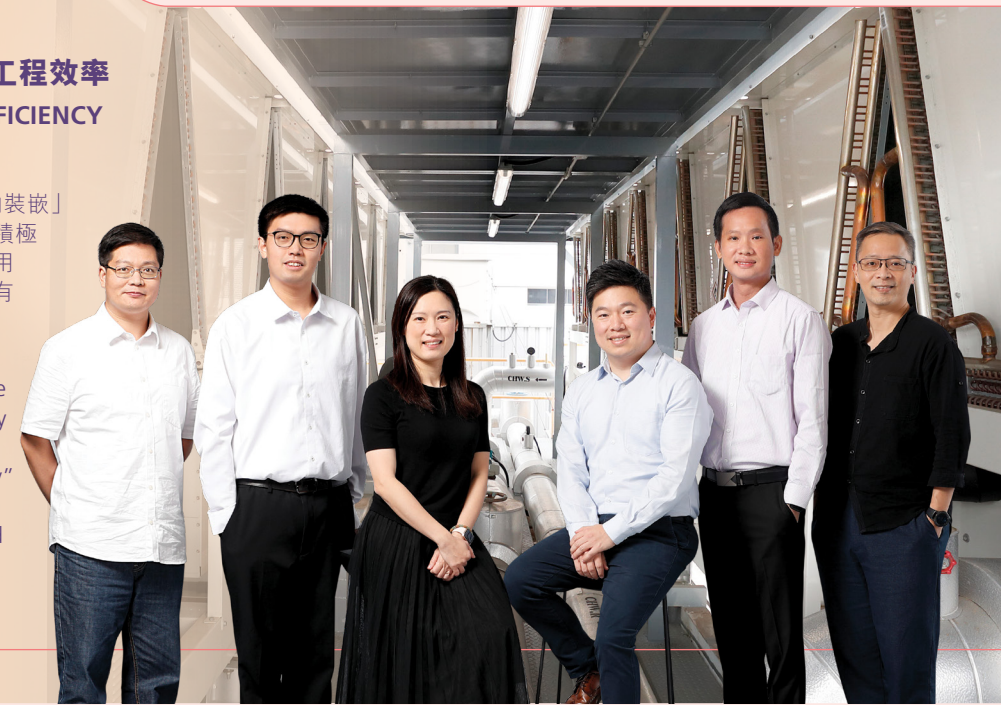
Utilising open data formats, open BIM enables collaboration across engineering teams regardless of the software they use. Yet, during the conversion of open BIM models, data loss often occurs, causing the models to fail acceptance standards. Manual error checking is also very time-consuming. The DTD developed a collection of tools specifically designed to streamline the open BIM model conversion process for E&M systems. Ms Ching Yuen-yuen, an electronics engineer (1st left), explained that the team consolidated EMSD's years of handover experience and uploaded the requirements for various E&M asset attributes to the public buildingSMART Data Dictionary - the first and largest of its kind in Hong Kong - for industry reference. Moreover, the team developed conversion guidelines and plugins to assist users in converting open BIM models while minimising data loss. They also designed automated validation tools that save 90% of the time compared to manual checking of open BIM models.

The team won grand awards at local and international competitions. The team believes that open BIM can facilitate the diversification of BIM software, including promoting the application of Mainland-made software. The team is currently developing an open BIM model web viewer and an open BIM-enabled BIM-AM (Building Information Modelling – Asset Management) Portal, which can also be used by other works departments in the future.

採用機電裝備合成法 提升醫院工程效率 ENHANCING HOSPITAL PROJECT EFFICIENCY WITH MIMEP

「機電裝備合成法」採用「場外預製、場內裝嵌」模式，能顯著提升工程效率，是近年政府積極推動的重要技術之一。衛生工程部首次應用此技術，為兩家公立醫院更換空調系統，有效減低對醫院運作的影響。

The Multi-trade integrated Mechanical, Electrical and Plumbing (MiMEP) method, one of the key technologies actively promoted by the Government in recent years, adopts an "off-site prefabrication and on-site assembly" approach that significantly enhances project efficiency. The Health Sector Division applied this method for the first time to replace the air-conditioning systems in two public hospitals, effectively reducing disruptions to hospital operations.



首項工程是為瑪嘉烈醫院傳染病中心更換空氣處理機組及相關設備。工程師羅卓賢先生(右二)指，空氣處理機組是隔離病房負壓系統關鍵部分。為縮短病房停運時間並提高質量控制，團隊決定採用「機電裝備合成法」。他們先對空氣處理機組所在的機房進行三維點雲掃描，建立建築信息模擬模型，在工廠預製模組化機組和喉管，再運送到工地安裝。整項工程為期約一個月，較傳統模式節省約四成時間。

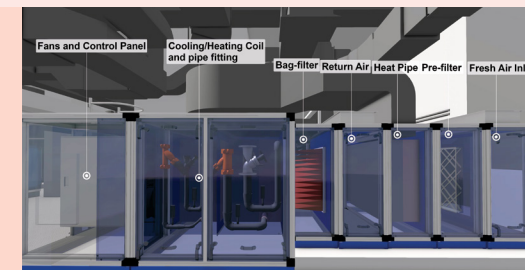
施工環境的要求越高，「機電裝備合成法」的優勢越為明顯。更換東區尤德夫人那打素醫院主座手術室製冷機組先導項目，正好印證了這一點。工程師雲永傑先生(左二)指，項目特別之處在於先安裝新機、再拆除舊機，以減少對醫院運作的影響。原有機組位於主座C座天台，團隊視察後發現鄰近的A座天台有合適空間安裝新機組。不過，要接駁新的冷水喉管系統至手術室樓層，需跨越直升機停機坪和垂直天井，喉管路徑長逾100米，且停機坪每日的施工時數有規限，工程難度可見一斑。雲先生指，所有切割和焊接工序均在工廠完成，現場只需進行螺絲固定，不僅縮短工地施工時間，更減少高空作業，提升工作安全。

The first project involved replacing the air-handling unit (AHU) and associated equipment at the Infectious Disease Centre of Princess Margaret Hospital. Mr Law Cheuk-yin, an engineer (2nd right), explained that the AHU is an essential component of the negative pressure system in isolation wards. To reduce ward downtime and improve quality control, the team adopted the MiMEP method. They first conducted a three-dimensional (3D) point cloud scan of the plant room housing the AHU to create a Building Information Modelling (BIM) model. The modularised AHU and pipework were prefabricated in the factory and then delivered to the site for installation. The entire project took about one month, saving approximately 40% of the time compared to conventional methods.

The advantages of the MiMEP technology become especially apparent in construction environments with stringent requirements, as demonstrated by the pilot project involving the replacement of chillers for the operating theatres in the Main Block of Pamela Youde Nethersole Eastern Hospital. Mr Wan Wing-kit, Victor, an engineer (2nd left), highlighted the project's unique approach of installing new units before removing the old ones to minimise the impact on hospital operations. The original chillers were located on the rooftop of Block C of the Main Block. After inspection, the team identified suitable space for the new chillers on the rooftop of the adjacent Block A. However, connecting the new chilled water pipework system to the operating theatre floors required traversing the helipad and the vertical light well, with a pipe run exceeding 100 metres. Limited daily construction hours on the helipad also added complexity to the task. Mr Wan said all cutting and welding processes were completed in the factory, requiring only screw fastening on site. This approach not only shortened on-site construction time but also reduced high-altitude work, thereby enhancing work safety.

我們採用「機電裝備合成法」為瑪嘉烈醫院更換空氣處理機組，透過把機組模組化，大幅節省現場安裝時間。

We adopted the MiMEP technology to replace the AHU at the Princess Margaret Hospital. By modularising the units, we significantly reduced the on-site installation time.



營運服務 TRADING SERVICES

抓緊機遇 積極求變

我們秉持以客為本的企業文化，致力為客戶和公眾帶來改變。過去一年，不論是翻新老化設施、協助新場地交接，或是為大型活動提升機電設施，我們都全力以赴，優先滿足客戶的需要。我們在過程中成功解決許多存在已久的問題，提升客戶設施的操作和維修保養效率。

以香港體育館為例，我們協助康樂及文化事務署（康文署）安裝全新的大型全彩色發光二極管顯示屏系統，場館四邊各設一面顯示屏，取代原有設備。這個項目有效解決客戶面對的多項長期問題，包括維修保養困難，以及舊系統過重所帶來的挑戰。新顯示屏不僅重量較輕，易於維修保養，更是康文署所有場地中像素密度最高的顯示屏，能為觀眾帶來更卓越的視覺體驗。



儘管香港體育館檔期緊湊，機電署仍成功完成全新發光二極管顯示屏系統的安裝工程，為即將舉行的全運會賽事做好準備。新系統不僅解決了天花板承重限制的安全問題，更提供高解析度影像，全面提升觀眾的現場觀賽體驗。

Despite a tight venue schedule, the EMSTF successfully completed the installation of a new LED display system at the Hong Kong Coliseum, in preparation for the upcoming National Games events. The new system not only addresses safety concerns related to ceiling load limits, but also delivers high-resolution images that significantly enhance the on-site spectators' viewing experience.

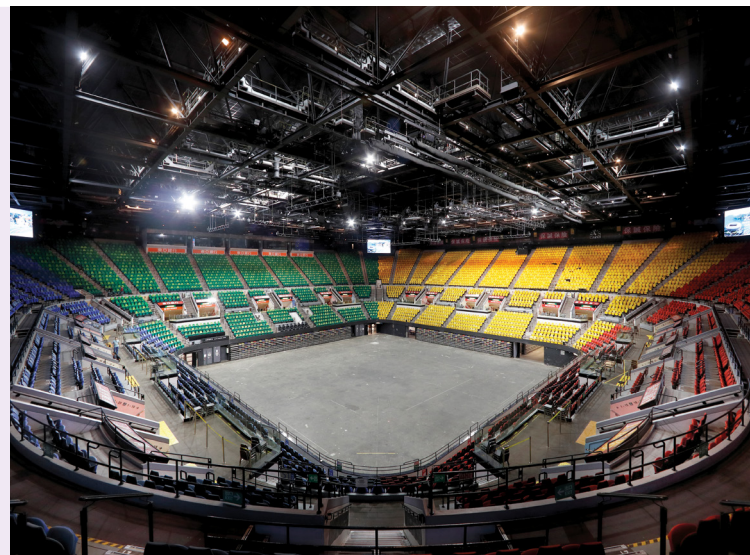
嶄新服務協議 加強伙伴關係

在2024/25年度，營運基金與多個客戶簽訂或續簽服務水平協議，包括與香港郵政簽訂四年服務水平協議、與醫務衛生局（醫衛局）就香港中醫醫院（中醫醫院）簽訂五年服務水平協議，以及與香港警務處（警務處）簽訂六年服務水平協議。我們亦獲醫院管理局（醫管局）發出意向書，計劃簽訂為期十年的服務水平協議，涵蓋機電、空調和屋宇裝備設施的操作和維修保養服務。

SEIZING OPPORTUNITIES TO MAKE A DIFFERENCE

Striving to make a difference for clients and the public is the foundation of our customer-focused culture. During the year, we seized every opportunity to satisfy clients' priority needs, whether on renovating ageing facilities, facilitating the handover of new venues, or enhancing electrical and mechanical (E&M) facilities for major events. In the process, we also resolved many long-standing barriers to the optimal operation and maintenance (O&M) of client facilities.

A case in point was the Hong Kong Coliseum, where we helped the Leisure and Cultural Services Department (LCSD) install a new large, four-sided full-colour light emitting diode (LED) display system, with one screen on each side of the arena, replacing the old display. The project addressed several persistent issues for the client, including maintenance difficulties and challenges arising from the heavy weight of the previous system. Lighter and easier to maintain, the new display features the highest pixel density among all LCSD venue displays – much to the delight of spectators.



New SLAs and Stronger Partnerships

2024/25 saw the EMSTF enter into several new and renewed Service Level Agreements (SLAs), including a four-year SLA with Hongkong Post, a five-year SLA with the Health Bureau (HKB) for the Chinese Medicine Hospital of Hong Kong (CMHHK), and a six-year SLA with the Hong Kong Police Force (HKPF). We also secured a Letter of Intent from the Hospital Authority (HA) for a ten-year SLA on O&M services for electrical, mechanical, air-conditioning and building services (EMABS) facilities.

2025年1月3日，營運基金與醫衛局簽訂為期五年的服務水平協議，為香港首間中醫醫院提供專業的機電服務和創科方案。

On 3 January 2025, the EMSTF signed a five-year SLA with the HKB to deliver professional E&M services and I&T solutions for Hong Kong's first Chinese medicine hospital.



根據與醫衛局簽訂的服務水平協議，我們會在中醫醫院於2025年12月分階段啟用時提供機電服務，並為該醫院和鄰近的政府中藥檢測中心提供創新科技（創科）項目服務。

至於現行與醫管局的機電、空調和屋宇裝備設施維修保養合約，我們會進一步為政府第一個十年醫院發展計劃下的新建醫院和重建醫院，提供機電、空調和屋宇裝備系統的操作和維修保養服務。此外，我們會擔任所有新建醫院（包括部分附表2醫院）的技術顧問，由醫院初期設計階段開始進行獨立技術審核，預先規劃醫院機電設施的整個生命周期管理，涵蓋採購、維修保養和設施更換，務求從系統層面更有效地預防事故發生。

年內，多項醫管局新設施已交由我們負責操作和維修保養，包括北區社區健康中心和醫院管理局支援服務中心。啟德新急症醫院和瑪麗醫院新大樓則預計於2025年稍後投入服務。

Under the SLA with the HKB, we will provide E&M services for the CMHHK when it opens in phases starting December 2025, and deliver innovation and technology (I&T) project services to both the hospital and the nearby Government Chinese Medicines Testing Institute.

Regarding the existing maintenance contract for the EMABS facilities with the HA, we will further provide O&M services for the EMABS systems at both new and redeveloped hospitals under the Government's first Ten-year Hospital Development Plan. Additionally, we are expected to assume the role of technical advisor and conduct independent technical audits at all new hospitals, including selected Schedule 2 hospitals, starting as early as the hospital design stage. The aim is to envisage and plan for the life-cycle management of E&M facilities, from procurement to maintenance and replacement, which will better prevent incidents on a systemic level.

During the year, multiple new HA facilities were handed over to us for O&M services, including the North District Community Health Centre and the Hospital Authority Supporting Services Centre. The New Acute Hospital in Kai Tak and the Queen Mary Hospital New Block are scheduled to commence services later in 2025.



機電署在北區社區健康中心大樓採用建築信息模擬技術，把各種機電設備的數據進行數碼化，在單一平台上集中管理，從而提高維修及保養效率，並支援日常運作。

The EMSTF has adopted Building Information Modelling technology at the North District Community Health Centre Building. This involves digitising and centrally managing the data of various E&M equipment on a single platform, enhancing repair and maintenance efficiency while supporting daily operations.



為促進醫管局與營運基金相互了解，鞏固工作伙伴關係，我們於2025年3月展開高級工程師人員交流計劃，雙方各派一名人員互換工作崗位，為期年半至兩年。這是我們與醫管局的首個交流計劃，有助加強雙方合作。

To enhance mutual understanding and forge stronger working-level partnerships, we launched in March 2025 an exchange programme for senior-engineer-level staff between the HA and EMSTF, one from each side, for reciprocal on-the-job attachment lasting about one and a half to two years. This is our first exchange initiative with the HA to strengthen our collaboration.

營運服務

TRADING SERVICES

了解客戶所需 促進融洽互信

我們時刻銘記要從客戶角度了解其需求，因此在年內舉辦多場研討會，與客戶深入交流。例如我們於7月聯同機場管理局(機管局)，在香港國際機場行政大樓舉辦2024年機管局創新與科技交流會，逾百名機管局人員和持份者參與討論，分享項目經驗。我們聆聽他們日常工作中的「痛點」，並提供精準到位的解決方案。同樣地，我們在香港科學園舉辦四場為期半天的團隊構建工作坊，其中一場與食物環境衛生署(食環署)合作，另外三場則與康文署合作，藉此加深彼此了解，建立融洽互信的工作伙伴關係。



為加強與客戶部門的溝通，我們在香港科學園為食環署和康文署舉辦四個半天的團隊建立工作坊。

To enhance communication with client departments, we organised four half-day team building workshops at the Hong Kong Science Park for the FEHD and the LCSD.



Understanding Clients' Needs and Building Rapport

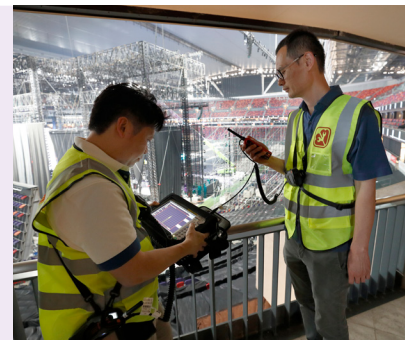
Always mindful of understanding clients' needs from their perspective, we held several seminars to have in-depth exchanges with them during the year. For instance, we partnered with the Airport Authority Hong Kong (AAHK) to hold the AAHK Innovation and Technology Seminar 2024 at the Hong Kong International Airport (HKIA) Tower in July, engaging over 100 AAHK staff and stakeholders in discussions and sharing of project experience. We listened to the "sore points" in their daily work and offered precise and targeted solutions. By the same token, we organised four half-day team building workshops at the Hong Kong Science Park, one with the Food and Environmental Hygiene Department (FEHD) and the other three with the LCSD, to enhance mutual understanding and build harmonious working partnerships.

粵港澳三地將於2025年11月聯合承辦第十五屆全國運動會(全運會)，多項賽事將於康文署場地舉行。我們自2024年5月展開籌備工作，並與全國運動會統籌辦公室、康文署、數字政策辦公室、香港電台和警務處等多方協調。我們的職責是按需要和賽事要求，更換及提升康文署場地的設備和技術系統；評估各政府場地電力供應的可靠度，並改善其照明設施；以及參與康文署場地及其他場館(例如將舉辦全運會賽事的啟德體育園)的綵排和測試賽。

我們成功為消防處在啟德主場館安裝全新的數碼集群無線電基站，大大提升消防處在場館內的無線電覆蓋範圍和救援應急能力，為全運會等世界級盛事提供更強支援。

全新的體育及表演場地啟德主場館，設有了新的數碼集群無線電基站，由機電署負責項目管理。基站全面數碼化，具優化頻譜使用率、語音加密、緊急呼叫通話等功能，覆蓋範圍廣泛，符合消防署的通訊要求。

The Kai Tak Stadium, a brand-new sports and performance venue, is equipped with a new TETRA base station, with project management undertaken by the EMSD. The fully digitalised TETRA base station features optimised spectrum utilisation, voice encryption, emergency call, with wide coverage meeting the FSD's communication requirements.



We successfully installed a new Terrestrial Trunked Radio (TETRA) base station at Kai Tak Stadium for the Fire Services Department (FSD), significantly enhanced the FSD's radio coverage and its rescue and emergency capabilities at the venue to provide stronger support for world-class events like the National Games.

The forthcoming 15th National Games, to be co-hosted by Guangdong, Hong Kong and Macao in November 2025, will feature multiple events at LCSD venues. We began preparations in May 2024, liaising with the National Games Coordination Office and various parties, including the LCSD, the Digital Policy Office, Radio Television Hong Kong and the HKPF. Our responsibilities are to replace and upgrade equipment and technical systems at LCSD venues as necessary to meet event requirements; assess the reliability of power supply at various government venues and enhance their lighting facilities; and participate in rehearsals and event simulations at LCSD venues and other locations, such as the Kai Tak Sports Park where National Games events will be held.

全運會亦為營運基金與大灣區同業機構舉辦首次交流活動提供良機，重點探討在體育及表演場地應用先進科技。本署助理署長/2帶領六名專業職系人員和17名督察人員組成代表團，於2024年11月前往深圳和廣州進行為期三天考察訪問。他們參觀多個表演和體育場地，包括數個指定用作舉行全運會賽事的運動場，並與內地官員座談，深入了解各場地的最新科技應用。是次交流不但拓展了參與人員的知識和視野，對我們籌備全運會及後續工作亦大有裨益。



機電署代表團在2024年11月到訪大灣區，實地考察全國運動會的比賽場地及其他表演場地，並與內地官員就最新科技應用進行交流。

During the visit to the Greater Bay Area in November 2024, the EMSD delegation conducted on-site visits to venues for the National Games and other performance venues, and exchanged views on the latest technological applications with Mainland officials.

為現有活動和設施進行創新

憑藉在農曆年宵市場處理臨時供電和設置遙距監察系統的豐富經驗，我們內部研發了升級網頁版農曆年宵市場監察系統，協助食環署確保2025年1月底在全港多區舉行的15個農曆年宵市場運作暢順。

該系統利用物聯網技術和傳感器，監察年宵市場的前期場地籌備工作，包括攤位檔主的活動，確保臨時供電系統運作正常，並按既定用途使用。監控快餐攤位的用電量尤為重要，能確保用電量維持在許可範圍內，避免電力超負荷。當監察系統偵測到攤位用電量過大，或臨時供電系統出現異常，會即時提醒負責的技術人員。有了這個預警機制，就能及早知會食環署人員和攤位檔主，以便即時跟進。這升級版系統不但確保電力供應和攤檔其他電力裝置運作正常，還能進行智能人流監控和分析，從而提升食環署對這項年度節慶活動的管理效能。

Innovating for Existing Events and Facilities

With rich experience in handling temporary power supply and setting up remote monitoring systems at Lunar New Year (LNY) fairs, we developed in-house an upgraded web-based LNY Fairs Monitoring System, to help the FEHD ensure smooth operation of the 15 LNY fairs held in various districts across Hong Kong in late January 2025.

The system uses Internet of Things (IoT) technology and sensors to monitor pre-fair preparatory site work, including stall operator activities, to ensure that the temporary power supply system is functioning properly and used for its intended purposes. Monitoring power consumption by fast food stalls is particularly important to ensure it stays within permitted limits, helping to avoid electrical overloads. When the monitoring system detects excessive power consumption at a stall or an anomaly in the temporary power supply system, it will promptly alert the responsible technical personnel. With this pre-alarm mechanism, both the FEHD and stall operators will be informed as soon as possible for immediate follow-up. The enhanced system not only guarantees the proper operation of the power supply and other electrical installations at the stalls, but also provides intelligent footfall monitoring and analysis to optimise the FEHD's management of this annual festive event.

操作和維修保養業務持續增長

年內，多個新場地交由營運基金提供操作和維修保養服務，進一步擴大了我們的核心業務。

香港國際機場三跑道系統於2024年11月正式啟用，標誌着香港的航空發展邁向新里程，並為營運基金在機場操作和維修保養服務創新方面帶來新機遇。

例子之一是獲獎的機場跑道助航燈自動維護機械人。這是我們與廣東省科學院和機管局合作研發的項目，目前正在廣州廠房進行試驗。該機械人配備各種通訊和協作的子系統，能循着以往維修保養記錄的路線，為跑道燈進行無人檢查並以乾冰清潔。機械人還能自動導航到跑道上的指定位置，清潔跑道燈和檢查螺栓鬆緊度，大大提高檢查和清潔數以千計跑道燈的效率，並減少有關工作的人力需求。該系統已獲批准香港短期專利。



(左) 機場跑道助航燈自動維護機械人可自動偵測和清潔跑道燈，騰出手處理其他工作。該創新方案大幅提升維修效率，同時確保跑道安全。

(右) 去年11月，立法會議員到訪機電署總部，透過現場示範了解機場跑道助航燈自動維護機械人的應用情況。

(Left) The Autonomous AGL Cleaning and Inspection Robot can automatically detect and clean the airfield ground lights, freeing up manpower for other tasks. This innovative solution significantly enhances maintenance efficiency while ensuring runway safety.

(Right) In November last year, Legislative Council members visited the EMSD Headquarters and learned about the application of the Autonomous AGL Cleaning and Inspection Robot through an on-site demonstration.

An Expanding O&M Portfolio

During the year, various new venues were handed over to the EMSTF for O&M services, further enriching our core business.

The Three-runway System (3RS) at the HKIA, officially launched in November 2024, marks a new milestone in the city's aviation development and opens up new opportunities for the EMSTF to innovate in airport O&M services.

An example is the award-winning Autonomous Airfield Ground Lighting (AGL) Cleaning and Inspection Robot, a joint project with the Guangdong Academy of Sciences and the AAHK, with ongoing trials at a workshop in Guangzhou. With subsystems that communicate and collaborate, the robot can perform unmanned inspection and cleaning of airfield ground lights using dry ice, following routes based on historical maintenance records. It can also autonomously navigate to designated runway positions to clean airfield ground lights and inspect bolt tightness, making the inspection and cleaning of thousands of airfield ground lights much more efficient and less labour-intensive. Hong Kong short-term patents have been granted for the system.



機電署在民航處新航空交通指揮塔安裝六套無間斷電源系統，確保電力供應穩定可靠。系統使用鋰電池，以提高效能和延長使用期限，並結合流動網絡和無線物聯網技術，以作持續監察。

The six uninterruptible power supply systems installed by the EMSD at the CAD's new Air Traffic Control Tower ensure a stable and reliable power supply. These systems, using lithium batteries for enhanced performance and extended lifespan, employ mobile networks and wireless IoT technology for continuous monitoring.



為確保香港國際機場的新航空交通管制指揮塔和三跑道系統能順利啟用，我們持續為民航處和香港天文台提供專業支援以及操作和維修保養服務，並與機管局合作為各個關鍵系統進行驗收測試和檢查。我們亦協助消防處擴充其關鍵飛機救援及滅火車隊，以配合三跑道系統全面運作的救援及滅火需要。

To ensure smooth commissioning of the new Air Traffic Control Tower and the 3RS at the HKIA, we have been providing professional support and O&M services to the Civil Aviation Department (CAD) and the Hong Kong Observatory, while co-operating with the AAHK in various acceptance tests and inspections of different critical systems. We also assisted the FSD in expanding its critical fleet of Aircraft Rescue and Firefighting Vehicles to meet the rescue and firefighting requirements for the full-fledged 3RS operation.



隨着三跑道系統於2024年11月啟用，機電署協助消防署採購和驗收新的飛機救援及滅火車隊，確保車輛符合所有安全標準和規格，配合三跑道系統的運作需要。

With the launch of the 3RS in November 2024, the EMSD assisted the FSD in the procurement and acceptance tests of the new fleet of Aircraft Rescue and Firefighting Vehicles, ensuring full compliance with the safety standards and specifications to support the operational needs of the 3RS.

年內交由我們操作和維修保養的其他場地包括：自2024年10月起分階段啟用的東九文化中心，是推動本港藝術與科技融合的旗艦表演場地；於2024年11月啟用的動物管理及動物福利綜合大樓；以及已完成擴建且同樣於2024年11月啟用的立法會綜合大樓，工程涉及在原有十層高大樓加建四層，以容納全體90位立法會議員。

Other venues handed over for O&M during the year included the East Kowloon Cultural Centre, positioned as a flagship performance venue for the convergence of arts and technology in Hong Kong, opened in phases since October 2024; the Animal Management and Animal Welfare Building Complex opened in November 2024; and the expanded Legislative Council (LegCo) Complex, also opened in November 2024, with four additional floors on top of the original ten-floor building to accommodate all 90 LegCo members.



東九文化中心作為表演場地的先驅，融合創新藝術與先進科技。機電署為場地的機電設施和舞台設備（例如舞台燈光系統）提供專業維修保養服務，為觀眾締造嶄新的劇院體驗。

As a pioneer performance venue that integrates innovative arts and advanced technology, the East Kowloon Cultural Centre is supported by the EMSD's professional maintenance of E&M facilities and stage equipment, such as stage lighting systems, to deliver an exceptional theatre experience to audiences.



此外，北區警察學院綜合訓練中心（缸瓦甫）的第一期工程將於2025年7月竣工，以支援警務處提供現代化的高效訓練。位於粉嶺芬園的警察駕駛及交通訓練中心和槍械及戰術訓練設施，會遷至新訓練中心。第二期工程預計於2026年竣工，屆時馬草壘靶場以及羅湖靶場和場內直升機停機坪，亦會遷往新訓練中心。

In addition, phase one of the Police College Integrated Training Centre (Kong Nga Po) in the North District will be completed in July 2025 to support modern and effective training for the HKPF. The Police Driving and Traffic Training Centre, and the Weapon and Tactics Training Facilities at Fan Garden, Fanling will be relocated to the new training centre. Phase two is expected to be completed in 2026. The Ma Tso Lung firing range, together with the Lo Wu firing range and the helipad therein will also be relocated to the new training centre by then.

興建中的項目還有將軍澳聯用綜合大樓，這座「一地多用」的原型建築設有公眾街市、醫療衛生服務、社會福利設施和政府辦公室，專為滿足將軍澳社區的需要而設，預計於2025年第三季完工。

Also under construction is the Joint-user Complex in Tseung Kwan O, a "single site, multiple use" prototype building which accommodates a public market, medical and health services, social welfare facilities, and government offices. Designed to cater to the needs of the Tseung Kwan O community, the Complex is scheduled for completion in the third quarter of 2025.

營運服務
TRADING SERVICES

翻新客戶的老舊場地對優化設施和改善外觀至關重要。以西灣河文娛中心為例，中心自2022年4月起暫時關閉，以進行翻新與改善工程，預計將於2025年6月以嶄新面貌重新開放，並配備先進設施，包括全新的劇場吊杆系統和其他升級舞台設備。皇后街熟食市場亦已進行改善工程，美化用餐區和攤檔外觀，同時重新配置廚房排氣系統，加強控制攤檔的煮食油煙和氣味排放。工程於2024年2月展開，而該場地已於同年9月全面恢復營運，為食客營造舒適寫意的用餐環境。

Renovation of clients' ageing venues is important for modernising the facilities and enhancing their aesthetic appeal. The Sai Wan Ho Civic Centre, for example, has been temporarily closed since April 2022 for renovation and improvement. It is expected to reopen in June 2025 with a brand-new look and state-of-the-art facilities, including a new theatre fly system and other upgraded stage equipment. The Queen Street Cooked Food Market also underwent enhancement works to elevate the aesthetic appeal of its dining area and stalls, alongside reconfiguring the kitchen exhaust system to improve the control of cooking fume and odour emissions at the stalls. The works began in February 2024, and the venue resumed full operation in September 2024, fostering a warm and comfortable dining environment for patrons.



(左)西灣河文娛中心正進行翻新及改善工程至2025年6月。是次工程為劇院引入自動化吊杆系統，並首次在港島區中小型表演場地採用發光二極管舞台燈及追光燈，可大大減少高達80%的耗電量。



(右)機電署為食環署在皇后街熟食市場推行優化工程，包括打造全新廚房排氣系統，以及全面更換升降機和自動扶梯，致力提升安全與舒適度，從而改善市場環境和使用體驗。

(Left) Sai Wan Ho Civic Centre is undergoing renovation and enhancement works until June 2025. The upgrades will feature an automated fly system in the theatre and introduce Hong Kong Island's first LED stage lighting and spotlights for a small and medium-sized performance venue. These enhancements can reduce energy consumption by up to 80%.

(Right) The EMSD carried out an enhancement project for the FEHD at the Queen Street Cooked Food Market, which included the installation of a brand-new kitchen exhaust system and the complete replacement of lifts and escalators. The project was dedicated to improve safety and comfort, thereby enhancing the market environment and user experience.

超過一百個燈控路口已安裝輔助裝置，加強行人過路處安全。該輔助裝置在「紅色人像」燈號亮起時照亮行人等候區，提醒光照範圍內的行人在過馬路前暫停使用手機或其他分心行為，留意交通燈號。此外，我們在2025年第一季開始更換現有俗稱「黃波燈」的斑馬線信號燈（另稱「卑利沙燈」）。優化的黃波燈配備可發出黃色閃光的光環，支柱部分亦會發出白色閃光，提醒駕駛者留意斑馬線。

Over 100 signalised junctions have been implemented with auxiliary devices to enhance pedestrians' safety at road crossings by illuminating the pedestrian waiting area during "red man" signal. The illumination serves as a visual cue prompting pedestrians within the lit area to stop looking at their mobile phones or other distractions and heed the traffic signals before crossing the road. In the first quarter of 2025, we began replacing existing zebra crossing lights, also known as "Belisha Beacons", with enhanced ones consisting of a halo of flashing yellow light and a post with flashing white bands to effectively draw motorists' attention to the presence of zebra crossings.



機電署自2025年第一季起開始為運輸署更換俗稱「黃波燈」（又稱「卑利沙燈」）的舊式斑馬線燈，提升道路安全意識。新燈標會發出黃色閃光光環，而燈柱會發出白色閃光，以提醒駕駛者禮讓斑馬線上的行人。

Since the first quarter of 2025, the EMSD has begun replacing aged zebra crossing lights, also known as "Belisha Beacons", with enhanced ones for the Transport Department to enhance road safety awareness. The new beacons emit flashing yellow light halo, while the posts emit flashing white bands, reminding drivers to give way to pedestrians at zebra crossings.

現有公共屋邨完成鋪設物聯網基礎設施後，將具備廣泛應用創科的潛力。我們至今已在房屋署數個屋邨設置超過一百個「政府物聯網」基站，為在大門、升降機、公眾洗手間和停車場應用創科奠定穩固基礎。

Existing public housing estates present strong potential for I&T applications once equipped with IoT infrastructure. To date, we have set up more than 100 Government-Wide IoT Network (GWIN) gateways in multiple housing estates of the Housing Department, providing a backbone for I&T applications in doors, lifts, public toilets and car parks.

機電署在公共屋邨安裝「政府物聯網」基站和傳感器，以監察各項設施和機電設備。系統把水浸、回收箱容量、違例泊車等多項參數數碼化，實現實時監察，便利屋邨管理。

The EMSD has installed GWIN gateways and sensors in public housing estates to monitor various facilities and E&M equipment. By digitising parameters such as water immersion, recycling bin capacity and illegal parking, the system enables real-time monitoring and facilitates estate management.

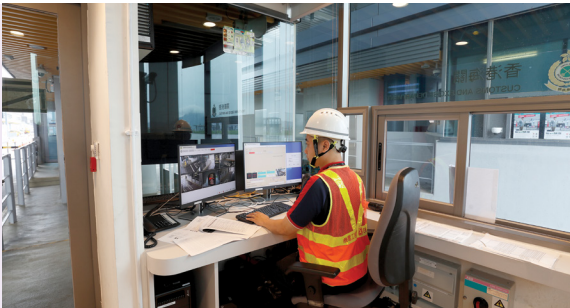


我們持續在連接香港與內地的邊境管制站推出創科項目。以深圳灣管制站為例，我們為香港海關（海關）試行一套人工智能閉路電視系統，實時監察從貨車掉落的物品。該系統能監察前往檢查大樓的貨車，如發現車輛在途中掉落疑似違禁物品，人工智能閉路電視監控系統會立即觸發警報，通知海關人員進行調查，有效提升貨車檢查的效率。系統目前正處於測試和調整階段，預計於2026年投入服務。

I&T initiatives have continued at the boundary control points connecting Hong Kong and the Mainland. At the Shenzhen Bay Control Point, for instance, we conducted a trial of an AI-enhanced closed-circuit television (CCTV) system for the Customs and Excise Department (C&ED) for real-time surveillance of fallen objects from vehicles. The AI CCTV system monitors the dedicated goods vehicle which is instructed to the examination area for further inspection. If there is any suspicious contraband object falling from the vehicle while approaching the examination building, the AI CCTV system will promptly trigger an alarm to alert C&ED officers to look into the matter, thereby enabling more efficient inspection of goods vehicle. The system is being tested and refined and will be operational in 2026.

與此同時，我們全力支援駐守港珠澳大橋香港口岸及其他過境設施的客戶部門，為將於2025年年底分階段實行的「粵車南下」計劃做好準備。

At the same time, we have been providing support to clients stationed at the Hong Kong-Zhuhai-Macao Bridge Hong Kong Port and other boundary-crossing facilities to prepare for the Southbound Travel for Guangdong Vehicles, to be launched in phases by the end of 2025.



為配合「粵車南下」計劃，機電署為港珠澳大橋香港口岸的車輛自動清關支援系統進行升級，系統可快速辨識粵港澳三地車牌，優化通關流程。

To support the Southbound Travel for Guangdong Vehicles, the EMSD has upgraded the Automatic Vehicle Clearance Support System at the Hong Kong-Zhuhai-Macao Bridge Hong Kong Port. The system enables rapid identification of licence plates from Guangdong, Hong Kong and Macao, optimising the clearance processes.

營運服務 TRADING SERVICES



迅速處理跑道事故 保障航空安全 SWIFT RESPONSE TO RUNWAY INCIDENT TO ENSURE AVIATION SAFETY

2024年6月17日，一架由香港國際機場起飛的貨機緊急折返，降落時輪胎爆裂，導致多盞跑道燈損毀。邊境及運輸工程部高級工程師梁栢堅先生(右四)率領團隊迅速修復受損設施，協助機場恢復正常運作，保障航班升降安全。

On 17 June 2024, a cargo aircraft departing from the Hong Kong International Airport (HKIA) made an emergency return and landed with burst tyres, causing damage to multiple airfield ground lights. Mr Leung Pak-kin, a senior engineer of the Boundary Crossing Facilities and Transport Services Division (4th right), led his team to swiftly repair the damaged facilities, helping restore normal airport operations and ensuring safe flight movements.

當日清晨，跑道燈分組接獲通知，一架貨機在機場南跑道起飛時遺下輪胎碎片，飛機需改用北跑道升降。分組人員隨即前往南跑道進行檢查，並更換受損跑道燈，確保跑道安全。

然而，該貨機起飛後不足兩小時即緊急折返。上午7時12分，貨機在北跑道降落時輪胎爆裂，令多盞跑道燈受損。由於當時機場三跑道系統尚未啟用，僅餘南跑道可供飛機升降，航班運作嚴重受阻。梁先生立即統籌維修工作，他表示：「跑道燈對飛機安全升降十分重要，如有損毀，客運和貨運都會大受影響。因此，我們必須迅速完成修復，讓機場恢復正常運作。」

高級電氣督察劉德輝先生(左四)立即動員跑道燈分組，安排夜更人員留守，與日更人員合力處理事件。他指出：「最大挑戰在於與時間競賽。我們迅速採取行動，從倉庫調配所需燈具，展開更換工作。」

當日約40名人員參與搶修，高峯時期分成七組同步作業，務求在最短時間內完成任務。助理電氣督察岑惠峯先生(左二)在機場服務逾20年，他表示：「這是我職業生涯中處理過的最大型事故，真的很難忘。全靠團隊的合作和默契，我們成功完成任務，感到非常滿足。」

事故過後，團隊與客戶商討增加燈具庫存量，確保未來遇到突發事故時能有足夠物料應對，加強處理能力。

機場管理局(機管局)其後向團隊發出嘉許信，表揚他們的出色表現。梁先生總結道：「我們的使命是透過專業服務維護航空安全，成為客戶值得信賴的伙伴。我們會繼續與機管局攜手合作，協助捍衛和鞏固香港作為國際航空樞紐的地位。」

Early that morning, the Airfield Ground Lighting (AGL) Sub-section was alerted that a cargo aircraft had left tyre fragments on the South Runway during take-off, prompting the flights to switch to the North Runway for take-offs and landings. AGL staff immediately proceeded to inspect the South Runway and replaced the damaged airfield ground lights to ensure operational safety.

However, less than two hours after take-off, the cargo aircraft made an emergency return. At 7:12 am, it landed on the North Runway with burst tyres, causing damage to multiple airfield lights. Since the HKIA's Three-runway System had not yet been commissioned at that time, only the South Runway was available for aircraft movements, resulting in severe disruption to flight operations. Mr Leung immediately co-ordinated the repair efforts. He remarked, "Airfield lights are crucial to safe take-offs and landings of aircrafts. If they are damaged, both passenger and cargo transport will be greatly affected. Therefore, we had to complete the repairs quickly to restore normal airport operations."

Mr Lao Tak-fai, a senior electrical inspector (4th left), mobilised the AGL team at once, arranging for the night shift staff to remain on duty and work alongside the day shift staff to handle the incident. He noted, "The biggest challenge was the race against time. We acted quickly to retrieve the required lighting equipment from the warehouse and commenced the replacement works."

Approximately 40 staff members participated in the emergency repair that day. At peak times, they were split into seven teams working simultaneously to complete the task in the shortest possible time. Mr Shum Wai-fung, an assistant electrical inspector (2nd left), who has served at the HKIA for over 20 years, shared, "This is the largest incident I have ever handled in my career. It was truly unforgettable. Thanks to our teamwork and tacit understanding, we successfully completed the task and felt very satisfied."

Following the incident, the team had discussions with the client about increasing the inventory of lighting equipment to ensure sufficient materials were available to handle future emergencies and strengthen response capabilities.

The Airport Authority Hong Kong (AAHK) later issued a commendation letter to the team, recognising their exceptional performance. "Our mission is to uphold aviation safety through professional services and become a trusted partner to our client. We will continue to work closely with the AAHK to help safeguard and strengthen Hong Kong's role as an international aviation hub," Mr Leung concluded.

上下一心 協助客戶恢復公共服務

UNITED IN PURPOSE SUPPORTING CLIENTS IN RESTORING PUBLIC SERVICES

綜合工程部香港區維修分部1負責中環、灣仔和金鐘多個政府場地的機電設備維修保養，在應對突發事件方面經驗豐富。去年夏季，灣仔入境事務大樓發生電力故障，高級工程師丁邦佑女士(右三)率領團隊迅速應對，成功協助客戶恢復公共服務。

The Hong Kong Maintenance Sub-division 1 of the General Engineering Services Division, responsible for maintaining electrical and mechanical equipment at various government venues in Central, Wan Chai and Admiralty, has extensive experience in responding to emergencies. Last summer, when a power failure occurred at the Immigration Tower in Wan Chai, Ms Ting Pong-yau, Fanny, a senior engineer (3rd right), led her team in a swift response and successfully helped clients to restore public services.



2024年6月28日凌晨約3時，維修團隊接獲緊急通知，指入境事務大樓出現電力故障。團隊旋即趕赴現場，發現地下電掣房的空氣斷路器「跳掣」。經徹底檢查後，懷疑主線槽外殼滲水導致短路，令大樓北翼38樓至48樓停電，波及多個政府部門，包括位於42樓、24小時運作的水務署客戶電話諮詢中心。

由於入境事務大樓樓齡逾30年，且歷經多個政府部門遷入遷出，尋找合適的備用電源是一大挑戰。時任區域經理余國榮先生果斷調動另一組人員，聯同承辦商共約40人到場支援。憑藉豐富經驗，他們迅速確定臨時供電接駁位置。高級督察劉振康先生(中)負責協調各組工作：「我們分成兩組，同步進行臨時供電接駁。我全程在場監察進度，遇有人手或物資短缺便即時處理；另一組人員則借調近50台風扇供客戶使用。」

帶領團隊的丁女士指，由於水務署熱線服務受影響，客戶及部門高層非常關注事件。團隊爭分奪秒搶修，於早上約8時完成臨時供電接駁，恢復電話諮詢中心供電；下午2時，空調恢復運作。團隊持續監察電力供應情況，以策安全。丁女士形容，當日情況如同「救火」般緊急，同時亦需安撫客戶情緒：「空調剛恢復時，室內仍很悶熱。我們耐心向客戶解釋，因空調耗電量大，必須以安全為首，逐層重新啟動，以免電力負荷過重。」

儘管整個過程充滿挑戰，但機電署人員所展現的團隊精神，令人難忘。劉先生說：「不同部別的人員，包括之前較少合作的，也第一時間趕來支援，無分彼此，令人非常感動。」

At around 3 am on 28 June 2024, the maintenance team received an urgent notification of a power failure at the Immigration Tower. The team shortly rushed to the scene, and found that an air circuit breaker in the switch room on ground floor had tripped off. After a thorough inspection, they suspected that water had penetrated the casing of the bus duct, causing a short circuit that triggered a power outage affecting the 38th to the 48th floors of the building's north wing. Among the affected departments was the Water Supplies Department's (WSD) 24-hour Customer Telephone Enquiry Centre on the 42nd floor.

Given that the Immigration Tower was over 30 years old and had undergone frequent relocations of various government departments, identifying a suitable backup power source was a major challenge. The then regional manager, Mr Shee Kwok-wing, decisively mobilised another team of staff, along with contractors totalling around 40 people, to provide on-site support. Leveraging their extensive experience, they quickly identified a location for a temporary power connection. Mr Lau Chun-hong, a senior inspector (centre), was responsible for co-ordinating the work between teams, "We split into two teams, working concurrently to establish the temporary power supply. I closely monitored the entire progress on site and immediately dealt with any shortages in manpower or materials. Another team arranged for nearly 50 fans for our clients' use."

Ms Ting, who led the team, pointed out that as the WSD's hotline service was affected, both the clients and the EMSD management were highly concerned about the incident. The team raced against the time to do the urgent repairs. By around 8 am, the temporary power connection was completed, restoring electricity to the telephone enquiry centre. Air-conditioning resumed at 2 pm, with the team continuously monitoring the power supply to ensure safety. Ms Ting described the day as feeling like a firefighting mission, and meanwhile they needed to reassure the clients. "When the air-conditioning just resumed, the room was still hot and stuffy. We patiently explained to our clients that air-conditioning consumed a lot of power, so we had to prioritise safety and restart the system floor by floor to avoid electrical overload."

Despite the many challenges throughout the process, the team spirit demonstrated by EMSD staff was impressive. Mr Lau remarked, "Staff from different divisions, including those who had rarely worked together before, rushed to help us at a moment's notice without hesitation. It was truly touching."

營運服務 TRADING SERVICES



以病人福祉為首 全力支援醫院發展 COMMITMENT TO PATIENT WELFARE FULL SUPPORT FOR HOSPITAL DEVELOPMENT

醫院發展計劃等大型工程項目，在落成啟用初期往往面臨各種挑戰。以廣華醫院的電力事故為例，儘管該院並非機電署負責保養的場地，衛生工程部作為醫院管理局（醫管局）的長期合作伙伴，仍竭盡所能，運用專業知識協助醫管局化解危機，保障病人安全。

Large-scale engineering projects such as hospital development plans inevitably encounter various challenges during the initial commissioning stage. Take the power incidents that occurred at Kwong Wah Hospital (KWH) as an example. Although KWH did not fall under the maintenance responsibility of the EMSD, the Health Sector Division, as a longstanding partner of the Hospital Authority (HA), did its utmost and leveraged its expertise to help the HA resolve the crisis and safeguard patient safety.

2024年6月，廣華醫院重建計劃第一期大樓的無間斷電源系統發生故障，導致電力供應中斷，影響手術室運作。院方為安全起見，安排二十多宗非緊急手術改期，以便進行全面檢查。工程師潘曉晴女士（右）憶述，當時她與團隊密切關注事態發展，迅速檢視其他醫院的同類設施，並調配資源，隨時準備提供技術支援。

潘女士和其團隊在維修公立醫院手術室無間斷電源系統方面經驗豐富。他們聯同醫管局的專家和代表，連夜進行緊急測試和檢查，務求盡快恢復系統運作。潘女士特別指出，團隊審視測試計劃和程序，確保測試方法合適，能在短時間內準確評估系統表現。她表示：「雖然廣華醫院不在部門的保養範圍，但我們非常珍惜醫管局的信任。能夠發揮所長，運用專業知識和經驗協助處理事故，回饋社會，對我們而言是莫大的成就。」

高級工程師葉煒堂先生（中）和工程師陳偉雄先生（左）分別在2024年和2025年協助廣華醫院處理兩宗由繼電器「跳掣」引起的電力事故。葉先生與醫管局專家合作，深入檢視供電系統結構，向院方管理層解釋潛在成因，並提出改進建議，促進後續調查。他建議院方就處理電力故障制訂緊急電力切換流程，以提升整體應變效率。

在2025年的事故中，陳先生與團隊通宵提供技術支援，迅速檢視電力系統設計、監控設備和相關數據，並建議重新分配電纜負荷，進行電力質量評估，務求長遠提升供電韌性。陳先生更牽頭協調醫管局、大學學者、顧問公司、本地承辦商和海外設備製造商進行測試，成功找出事故起因。陳先生總結道：「我們與醫管局一直緊密合作，並肩作戰，攜手共渡不少難關，因此我們願意多走一步，除了提供專業支援，亦主動檢視其他負責場地的可改善之處。」

In June 2024, a power interruption caused by the malfunction in the uninterruptible power supply (UPS) system affected the operation of operating theatres in the Phase 1 Building of KWH's Redevelopment Project. Prioritising safety, the hospital rescheduled more than 20 elective surgeries to allow for comprehensive inspections. Ms Poon Hiu-ching, an engineer (right), recalled that she and her team closely monitored the situation, promptly reviewed similar facilities in other hospitals and mobilised resources to prepare for any necessary technical support.

With extensive experience in maintaining UPS systems for operating theatres at public hospitals, Ms Poon and her team, along with experts and representatives from the HA, conducted urgent testing and inspections overnight, aiming to restore system operation as quickly as possible. Ms Poon emphasised her team's contribution in reviewing the test plan and procedures to ensure the testing methods were appropriate to accurately assess system performance within a short timeframe. "Although KWH is not within our maintenance scope, we deeply value the trust from the HA. Being able to use our expertise and experience to help manage the incident and contribute to the community brought us a great sense of accomplishment," she said.

Mr Yip Wai-tong, a senior engineer (centre), and Mr Chan Wai-hung, an engineer (left), assisted KWH in addressing two power incidents caused by tripped relays in 2024 and 2025 respectively. In collaboration with the HA's experts, Mr Yip conducted a thorough review on the architecture of the power supply system, explained the potential causes to hospital management and proposed improvement recommendations to facilitate further investigation. He recommended the hospital to establish emergency changeover procedures for handling power failures to improve overall response efficiency.

In the incident in 2025, Mr Chan and his team provided overnight technical support by swiftly reviewing the power system design, monitoring devices and data collected. They then recommended redistributing the power load across cables and conducting a power quality assessment to enhance long-term supply resilience. Mr Chan also led co-ordination efforts with the HA, university scholars, consultants, local contractors and overseas equipment manufacturer to carry out testing, ultimately identifying the root cause of the incident. "We have been working closely with the HA, standing side by side through many challenges. That is why we are willing to go the extra mile, not only by providing professional support, but also by proactively identifying areas for improvement at other venues under our purview," Mr Chan concluded.

香港體育館設備大升級 展現專業創新精神 MAJOR UPGRADE OF HONG KONG COLISEUM'S EQUIPMENT SHOWCASES PROFESSIONAL INNOVATION

香港體育館（紅館）中央的四面投影屏幕，承載無數觀眾的集體回憶。然而，經過多年使用，這些屏幕逐漸老化。為迎接2025全國運動會，市政工程部去年年底為紅館展開大型更新工程，安裝全新顯示系統，以提升觀眾的視覺體驗。

The four-sided projection screens at the centre of the Hong Kong Coliseum (HKC) hold the collective memories of countless audiences. However, after years of use, these screens have gradually aged. In preparation for the 2025 National Games, the Municipal Sector Division launched a major renovation project for the HKC at the end of last year, installing a new display system to enhance the audience's visual experience.



工程師甘玉君女士（右）表示，是次工程充滿挑戰：團隊不僅要配合康樂及文化事務署（康文署）的運作需要，還要顧及紅館近40年樓齡建築的結構限制。為此，他們拆卸四部投影器和屏幕，以及場館頂部四個角落的部分座位；然後搭建地台和鋼架，以安裝新的發光二極管顯示屏。

在設計階段，團隊首先面對承重的難題。新顯示屏每塊尺寸為7米乘4米，連支架重約1.5噸。甘女士解釋說：「鑑於紅館已有幾十年歷史，要在原本設計為觀眾席的區域加裝大型設備，其結構要求與新建築的截然不同。我們運用跨學科專業知識，提出了可行方案。」除了設備本身的重量，他們還要考慮日後維修人員的額外重量，故此需要多次修改設計。高級電子督察張振豪先生（左）補充道：「我們想辦法減輕鋼架重量，包括減少支架數目，並把固定式維修平台改為流動式工作台。」

由於紅館節目繁忙，團隊僅有29天時間完成拆卸和安裝工程。可是在安裝過程中，團隊發現地台和鋼架無法依照原訂圖則安裝，甘女士於是立即與負責搭建地台的建築署商討應急方案。甘女士憶述說：「我們提出修改安裝方法，雙方在一天內就達成共識。我們隨即從內地訂製零件，以便追趕進度。」團隊安排兩更人員通宵工作，最終成功如期完成工程。新系統經過徹底測試，趕及在全國運動會測試賽順利啟用。

新顯示屏像素密度高，且外殼散熱快，無需使用散熱風扇；少了風扇噪音的干擾，觀眾便可盡情欣賞節目。新系統亦連接場館頂部和地面多個控制台，以及康文署的場外控制室，讓使用者可靈活操作。團隊期望觀眾再次造訪紅館時，能感受到他們對提升觀眾體驗的重視與用心。

Ms Kam Yuk-kwan, Lily, an engineer (right), said that this project was fraught with challenges. The team not only had to address the operational needs of the Leisure and Cultural Services Department (LCSD) but also consider the structural limitations of the nearly 40-year-old HKC. To this end, they removed the four projectors and projection screens, along with some seats in the four corners at the top of the venue. Supporting platform and steel frames were then constructed for installation of the new light emitting diode display screens.

During the design phase, the first hurdle faced by the team was load-bearing capacity. Each new screen measures 7 by 4 metres and weighs about 1.5 tonnes, including the supporting frame. Ms Kam explained, "Given the HKC's decades-long history, the addition of large equipment to areas originally designed for seating presents structural requirements entirely different from those of a new building. We leveraged interdisciplinary expertise to develop feasible solutions." Apart from the weight of the equipment itself, they had to take into account the additional load of maintenance personnel in the future, which necessitated multiple design revisions. Mr Cheung Chun-ho, Jimmie, a senior electronics inspector (left), added, "We tried to lighten the steel frames, including reducing the number of brackets and replacing the fixed maintenance platform with a mobile one."

Due to the busy schedule at the HKC, the team has only 29 days to complete the dismantling and installation works. Nevertheless, during the installation process, the team discovered that the supporting platform and steel frames could not be installed according to the original drawings. Ms Kam immediately discussed emergency solutions with the Architectural Services Department, which was responsible for constructing the supporting platform. She recalled, "We proposed modifying the installation method, and both parties reached a consensus within a day. We then promptly sourced parts from the Mainland to stay on track." By deploying two shifts of staff to work overnight, the team managed to complete the project on schedule. After thorough testing, the new system was launched smoothly in time for the National Games test events.

The new screens feature high pixel density and heat-dissipating casings, eliminating the need for cooling fans. Without the distraction from fan noises, audiences can fully enjoy the shows. The new system is also connected to multiple control panels at both the venue's upper and ground levels, as well as the LCSD's external control room, allowing for flexible operation. The team hopes that when audiences return to the HKC, they will appreciate the team's commitment and dedication devoted to enhance their experience.

科技融合可持續發展 實現節能減碳

營運基金的服務宗旨，是提供創新和可持續發展的服務，以滿足客戶需求，支援他們服務市民。我們的首要目標是運用科技節約能源、減少危害環境、提升工作安全，以及加快減碳進程。

成功案例「ChillStream®」

由營運基金自主研發的「ChillStream®」方案，運用人工智能技術優化製冷機組表現，屢獲殊榮。該系統已在公共衛生檢測中心成功試用，節省製冷機組每年的耗電量。我們計劃把「ChillStream®」推廣至14個客戶場地，包括將軍澳醫院、伊利沙伯醫院、中山紀念公園體育館、大埔政府合署、宏昌大廈、消防處總部大樓和警察總部，有助節約能源和減少碳排放。

此外，「ChillStream®」在多個重要活動中亮相，例如在日本橫濱舉行的2024年電機暨電子工程師學會世界計算智能大會，以及在西班牙巴塞羅那舉行的世界移動通訊大會2025。今年3月，我們以香港科技館成員身分參與巴塞羅那的活動，向全球訪客展示我們的尖端技術方案。



我們自行研發的「ChillStream®」目前在將軍澳醫院試行。該系統運用實時天氣預測和歷史數據，優化醫院24小時運作的製冷機組，從而節省能源。

Our self-developed ChillStream® is currently being tested at Tseung Kwan O Hospital. Using real-time weather forecasts and historical data, the system optimises the hospital's chillers, which operate round-the-clock, thereby saving energy.



機電署區域數碼監控中心利用「ChillStream®」人工智能優化系統，實時遙距監察製冷機組的效能，以節省能源。該系統現已在公共衛生檢測中心和將軍澳醫院應用，並會陸續推廣至其他客戶場地，以提升能源效益。

The EMSD's Regional Digital Control Centre uses the ChillStream® AI-based optimisation system to remotely monitor the performance of chillers in real time, thereby saving energy. Currently deployed at the Public Health Laboratory Centre and the Tseung Kwan O Hospital, the system will be progressively introduced to other client venues to enhance energy efficiency.

TECHNOLOGY COUPLED WITH SUSTAINABILITY
TO ACHIEVE ENERGY CONSERVATION AND
DECARBONISATION

Delivering innovative and sustainable services that satisfy clients' needs and support them in serving the public is the EMSTF's service objective. Our priority is to harness technology to save energy, reduce environmental hazards, enhance safety at work and accelerate decarbonisation.

Success Story: ChillStream®

ChillStream®, an award-winning solution developed in-house by the EMSTF for optimising chiller plant performance using artificial intelligence (AI) technology, saved annual electricity consumption for the chiller plant during a successful trial at the Public Health Laboratory Centre. Subsequently, we plan to extend ChillStream® to 14 client venues, including Tseung Kwan O Hospital (TKOH), Queen Elizabeth Hospital, the Sun Yat Sen Memorial Park Sports Centre, the Tai Po Government Offices Building, Wang Cheong Building, the Fire Services Headquarters Building and the Police Headquarters, contributing to energy savings and carbon emissions reduction.

ChillStream® was also featured at several prominent events, such as the Institute of Electrical and Electronics Engineers (IEEE) World Congress on Computational Intelligence 2024 in Yokohama, Japan, and the Mobile World Congress (MWC) 2025 in Barcelona, Spain. In March, we participated in the MWC Barcelona as a member of the Hong Kong Tech Pavilion, where we showcased our cutting-edge technological solutions to global audience.



機電署已在金鐘道政府合署安裝人工智能製冷機組優化系統。與傳統製冷機組相比，該系統能有效維持溫度在所需水平，大幅減低能源消耗。

The EMSD has installed the AI-based chiller optimisation system at the Queensway Government Offices. Compared to conventional chillers, the system effectively maintains the required temperature while significantly reducing energy consumption.

更多人工智能製冷機組和空氣處理機組
優化方案

與此同時，我們的策略業務單位在長沙灣政府數據中心大樓和金鐘道政府合署等各政府大樓應用類似的人工智能製冷機組優化系統。2024年，我們亦為海關總部大樓安裝人工智能製冷機組優化系統，成功節省製冷機組耗電量約6%。

「ChillStream®」是我們首個專有人工智能製冷機組優化方案，而我們首個自行研發的人工智能空氣處理機組優化方案，亦已在麥理浩牙科中心成功試用。

優化通風需要根據室內環境的變化來調節空氣處理機組的技術參數，通常需由人手調節，或透過中央控制及監控系統處理。相比之下，我們的人工智能解決方案運用由數據驅動的人工智能決策模型和實時室外天氣指標，預測動態室內環境，相應地調節每個空氣處理機組的技術參數，調節送風機轉速、冷水流量和鮮風流量，能更有效締造舒適的通風環境。

這方案不僅能維持溫度穩定舒適，亦有望節省5%至10%的空氣處理機組耗電量，同時減少人力需求，特別適用於每小時換氣要求中等的場地，例如等候大堂和牙科診所。

More AI Chiller and AHU Optimisation Solutions

Meanwhile, our Strategic Business Units have deployed similar AI-based chiller optimisation systems at various government buildings, such as the Government Data Centre Complex in Cheung Sha Wan and the Queensway Government Offices. In 2024, we also installed an AI-based chiller optimisation system at the Customs Headquarters Building, saving approximately 6% of chiller electricity consumption.

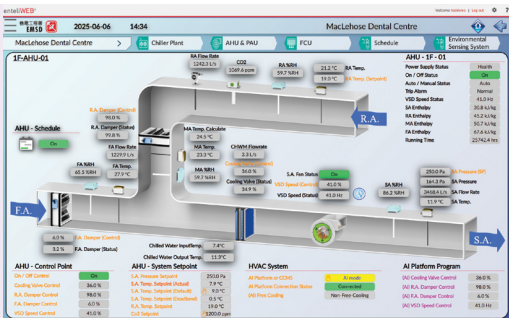
While ChillStream® is our first proprietary AI-based chiller optimisation solution, we have also successfully piloted our first in-house-developed AI-based Air-side Equipment Optimisation solution at the MacLehose Dental Centre.

Ventilation optimisation requires adjusting technical parameters of the air-side equipment, namely air-handling unit (AHU), based on the changes of the indoor environment. This is customarily done either manually or through a central control and monitoring system. In contrast, our AI solution leverages a data-driven decision-making AI model and real-time outdoor weather indicators to predict the dynamic indoor conditions and optimise the technical parameters of each AHU accordingly, adjusting the supply-air fan speed, chilled water flow rate and fresh-air flow rate to deliver comfortable ventilation more effectively.

The solution not only maintains stable thermal comfort, but also has the potential to reduce AHU electricity consumption by 5% to 10% while lowering manpower requirements. It is particularly ideal for venues requiring moderate air changes per hour, such as waiting halls and dental clinics.

由機電署開發的人工智能空氣處理機組優化方案已在麥理浩牙科中心試行。該方案通過分析室內環境變化和室外天氣指標的實時及歷史數據，並利用流動應用程式和網頁介面，實現對空氣處理機組技術參數的遙距監控和優化。

The AI-based Air-side Equipment Optimisation solution, developed by the EMSD, was trialled at the MacLehose Dental Centre. This solution optimises the technical parameters of the AHU by analysing real-time and historical data on indoor environmental changes and outdoor weather indicators, utilising mobile applications and web interfaces for remote monitoring and optimisation.



營運服務
TRADING SERVICES

部署公立醫院首批低全球升溫潛能值製冷機組
以助應對氣候變化

為配合《香港氣候行動藍圖2050》，我們與醫院管理局（醫管局）合作，推展多個節能減碳項目。其中，屯門醫院主座四台老化的水冷式製冷機組，已更換成採用R1233zd氫氟烯烴環保雪種的高效能水冷式製冷機組。這新雪種毒性低、非易燃，而且全球升溫潛能值極低。新製冷機組自2023年投入運作以來，空調製冷機組耗電量大減26%，省電約280萬度，相當於減少1950公噸碳排放。

《2024年保護臭氧層（修訂）條例草案》旨在逐步淘汰雪種和滅火劑所使用的高全球升溫潛能值氫氟碳化物等物質，並禁止其生產、進口和供應。作為本港公立醫院首個採用極低全球升溫潛能值製冷機組的項目，屯門醫院項目是支持條例草案的實際舉措。事實上，該項目更可說是香港減碳進程的里程碑，讓機電署和醫管局連續在2024年和2025年獲得美國供暖製冷及空調工程師學會頒發獎項，並在2025年獲得美國能源工程師學會的獎項。

同時，瑪嘉烈醫院的兩台氣冷式製冷機組已更換為採用R1234ze環保雪種的高效能新機組，並於2025年年初投入運作。我們也在2024年展開工程，把警察總部兩台老化的水冷式製冷機組更換為採用低全球升溫潛能值雪種的節能製冷機組。更換工程預計在2025年稍後竣工，可節省約35%的製冷機組耗電量。

我們的車輛工程團隊已進行試驗，研究在車輛空調系統維修保養中使用再生雪種（即經過回收、加工至恢復特定性能標準的雪種），從而減少對新雪種的需求，有助保護環境。

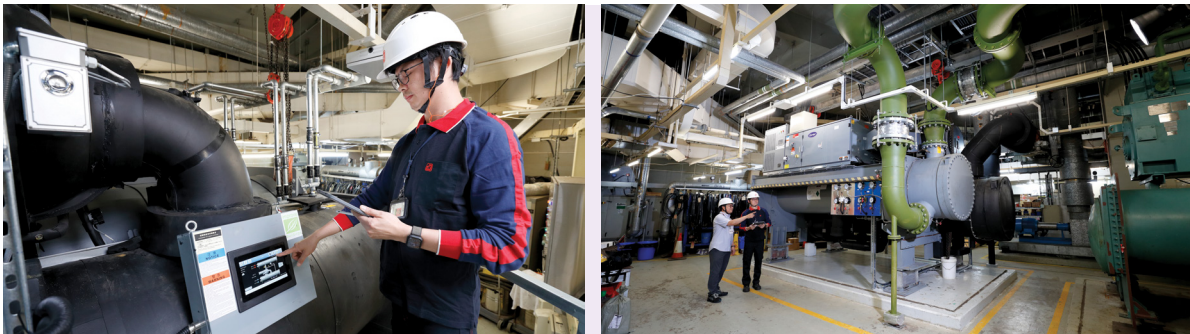
Deploying First Batch of Low-GWP Chillers at Public Hospitals
to Combat Climate Change

In support of the Hong Kong's Climate Action Plan 2050, we have collaborated with the Hospital Authority (HA) to embark on various energy-saving and carbon reduction projects. For example, we replaced four ageing water-cooled chillers at the Main Block of Tuen Mun Hospital (TMH) with highly-efficient water-cooled chillers using environmentally friendly hydrofluoroolefin (HFO) refrigerants R1233zd. Low in toxicity and non-inflammable, this new refrigerant features extremely low Global Warming Potential (GWP). Since the commissioning of the new chillers in 2023, the chiller plant's electricity consumption has dropped significantly by 26%, saving about 2.8 million kWh of electricity, equivalent to a reduction of 1 950 tonnes of carbon emissions.

As the first deployment of extremely low-GWP chillers in Hong Kong public hospital, the TMH project serves as a practical step to support the Ozone Layer Protection (Amendment) Bill 2024, which aims to phase out substances such as high-GWP hydrofluorocarbons (HFCs) used in refrigerants and fire suppressants and prohibit their manufacture, import and supply. Indeed, the TMH project represent a milestone in Hong Kong's decarbonisation journey, earning the EMSD and the HA awards from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) in both 2024 and 2025, and the Association of Energy Engineers in 2025.

Meanwhile, two air-cooled chillers at Princess Margaret Hospital (PMH) have been replaced with high efficiency new units using low-GWP refrigerants of R1234ze, operational from early 2025. In addition, we began works to replace two ageing water-cooled chillers at the Police Headquarters with energy-efficient models using low-GWP refrigerants in 2024. The replacement works are expected to be completed later in 2025, with an approximate 35% reduction in the chiller plant's electricity consumption.

Our vehicle engineering team has conducted a trial to explore the use of reclaimed refrigerants, i.e., refrigerants recovered, reprocessed and restored to a specified performance standard, during maintenance of air-conditioning systems in vehicles, thereby reducing the demand for new refrigerants and contributing to environmental protection.



機電署為警察總部更換兩台老化的製冷機組。新機組採用低全球升溫潛能值的雪種，能源效益更高。
The EMSD has replaced two ageing chillers at the Police Headquarters. With the use of low-GWP refrigerants, the new chillers offer enhanced energy efficiency.



機電署把瑪嘉烈醫院的氣冷式製冷機組，更換為採用低全球升溫潛能值雪種的機組，有效減少溫室氣體排放。鑑於該款雪種具輕度易燃特性，項目團隊加裝了雪種監察系統，以確保運作安全。

The EMSD has replaced the air-cooled chillers at Princess Margaret Hospital with units using a low-GWP refrigerant, effectively reducing greenhouse gas emissions. Given the mild flammability characteristics of the refrigerant, a refrigerant monitoring system has been installed to ensure operational safety.



新能源車及其他氣候行動措施

為把握新能源車帶來的減碳機遇，我們為食物環境衛生署（食環署）提供技術支援，試驗三輛氫燃料電池洗街車。我們亦於2024年協助舉辦「小畫家·大改變」碳中和—氫能洗街車命名及繪畫比賽，以提高公眾意識。學生的獲獎作品已用作三輛氫燃料電池洗街車的車身塗裝設計。

New Energy Vehicles and Other Climate Action Initiatives

To support decarbonisation opportunities brought about by new energy vehicles, we have been providing technical assistance to the Food and Environmental Hygiene Department (FEHD) for a pilot trial of three hydrogen fuel cell street washing vehicles. We also helped organise the “Little Artists, Big Changes” Carbon Neutrality – Hydrogen Fuelled Street Washing Vehicle Naming and Drawing Contest in 2024 to raise public awareness. The winning entries from the students were adopted as the livery design of the three hydrogen fuel cell street washing vehicles.



為配合《香港氫能發展策略》和推動本港使用氫燃料電池重型車輛，機電署為食環署引入三輛氫燃料電池洗街車，並於2025年6月起在新界地區試用。

To support the Strategy of Hydrogen Development in Hong Kong and promote the use of hydrogen fuel cell heavy vehicles in Hong Kong, we introduced three hydrogen fuel cell street washing vehicles for the FEHD. The trial of these vehicles commenced in the New Territories starting from June 2025.

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機電署運用「政府物聯通」，為食物環境衛生署的太陽能廢物壓縮箱加裝了遙距監察系統。該系統能監測箱內剩餘空間、機件是否出現故障，以及廢物收集的相關數據。

The EMSD has enhanced the solar-powered compacting refuse bins of the Food and Environmental Hygiene Department with a remote monitoring system using GWIN. This system enables tracking of the remaining capacity, mechanical faults, and waste collection data.



我們的團隊也協助食環署在大埔南華莆等鄉郊地點進行太陽能廢物壓縮箱試運作測試，並開發遙距監察系統。該系統能提供垃圾箱狀態和滿溢程度的即時資訊，以便清潔服務承辦商優化收集路線，僅在必要時清空垃圾箱，以減少不必要的工作和成本。

Our team also assisted the FEHD in testing its solar-powered compacting refuse bins in rural areas such as Nam Wa Po in Tai Po and developing a remote monitoring system. This system provides real-time data on bin status and fill levels, enabling cleaning service contractors to optimise collection routes and empty bins only when necessary, thereby reducing unnecessary work and costs.

過去一年，我們不斷發掘能源管理機會，務求滿足客戶對節能方案的持續需求。我們為香港警務處（警務處）推行的主要措施，包括把警官會所逾150盞高強度氣體放電泛光燈更換為超高光效的發光二極管泛光燈。此外，我們亦持續為警務處及其他紀律部隊的各個場地更換機電及照明系統。

During the year, we continued to identify energy management opportunities to satisfy our clients' ongoing demand for energy-saving solutions. Key initiatives for the Hong Kong Police Force (HKPF) included replacing over 150 high intensity discharge (HID) floodlights at the Police Officers' Club with ultra-efficacy light emitting diode (LED) floodlights. This was in addition to the ongoing replacements of E&M and lighting systems at various HKPF and other disciplined services venues.



與傳統高強度氣體放電泛光燈相比，我們在警官會所安裝的超高光效的新發光二極管泛光燈體積更小、重量更輕，可節省約40%的戶外照明耗電量。

Compared to traditional HID floodlights, the new ultra-efficacy LED floodlights installed at the Police Officers' Club are more compact and lightweight, achieving approximately 40% savings in electricity consumption for external lighting.

與此同時，我們與康樂及文化事務署（康文署）共同策劃，逐步把康文署轄下體育場館現有的照明系統更換為具有較高能源效益的發光二極管燈。2024/25年度，我們也協助食環署、康文署和海事處等客戶開展18個節能項目，包括更換空調和發光二極管照明系統，每年可節省超過200萬度電。連同過去五年已完成的55個節能項目，年度總省電量已超過832萬度。

我們協助路政署實施智能水浸偵測及預警系統，以應對極端天氣。此外，三條主要道路亦將會安裝新閉路電視監察系統，提升水浸偵測和應對能力。路政署亦已委託機電署在行車路上安裝更多閉路電視和傳感器，以更妥善地管理水浸對關鍵道路設施的影響。

Meanwhile, we have been planning with the Leisure and Cultural Services Department (LCSD) to gradually replace existing lighting in its sports venues with more energy-efficient LED lights. In 2024/25, we also supported 18 energy-saving projects for clients including the FEHD, the LCSD and the Marine Department, covering the replacement of air-conditioning and LED lighting systems with an annual electricity savings of over 2 million kWh. Combined with 55 energy-saving projects completed over the past five years, the total annual electricity savings exceeded 8.32 million kWh.

We have assisted the Highways Department (HyD) to implement the Smart Flood Detection and Warning System to combat the extreme weather. In addition, new closed-circuit television (CCTV) monitoring system to three critical roads will be provided to enhance flood monitoring and response. Besides, the HyD has engaged the EMSD to install more CCTVs and sensors on at-grade roads to better manage the flooding impact at critical infrastructures.



我們現正為機電署總部大樓天台二千多塊太陽能板進行更換工程，推動綠色能源發展。新太陽能板的效能更高，工程完成後，每塊太陽能板的輸出功率由150瓦增至430瓦，提升可再生能源的產量。

We are currently replacing over 2000 solar panels on the rooftop of the EMSD Headquarters Building for the development of green energy. The new panels feature enhanced efficiency. Upon the replacement, each panel's power output will increase from 150 watts to 430 watts, boosting renewable energy production.

機電署總部的節能措施升級

我們亦在機電署總部加強節能工作，年內開始升級天台的太陽能板，把這批20年前安裝的設備更換為更高效能的型號。

2024/25年度的財政預算案宣布，政府將推出太陽能發電建築先導計劃，研究在政府建築物幕牆應用太陽能發電技術，並以機電署總部大樓作為初步試點。先導計劃的目的是評估太陽能發電建築技術的成效和可行性，並參考計劃收集到的相關數據，例如實際發電效能、減少室內能耗表現、維修保養的要求和開支等，以評估先導計劃是否可推展至其他公私營機構。我們正籌備相關工作。

Ramping up Energy-Saving Measures at EMSD Headquarters

We also ramped up energy-saving efforts at the EMSD Headquarters. During the year, we began upgrading the rooftop photovoltaic (PV) panels, replacing units installed two decades ago with more efficient ones.

Furthermore, we are preparing to launch the Pilot Scheme on Building-Integrated Photovoltaics (BIPV) to explore PV technology applications on the facades of government buildings, using the EMSD Headquarters Building for initial trials, as announced in the 2024/25 Budget. The objective of the pilot scheme is to assess the effectiveness and feasibility of BIPV, taking into account the relevant data collected under the scheme, such as the actual power generation efficiency, performance in reducing indoor energy consumption as well as repair and maintenance requirements and expenditures, among others, so as to evaluate whether the pilot scheme can be extended to other public and private organisations.

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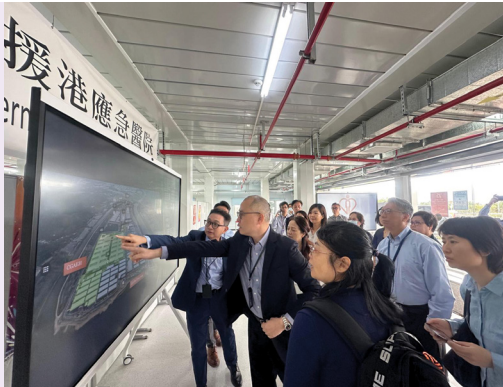
再進一步 變革轉型

為配合香港持續變革轉型，營運基金與內地伙伴加強合作，以提升服務質素。部門致力透過全面培訓和數碼化工作流程，提升運作效率，推動區內智能機電發展。

支持粵港澳大灣區合作

與粵港澳大灣區（大灣區）城市合作是我們的策略重點之一。其中一個重要例子包括為設於河套深港科技創新合作區香港園區的粵港澳大灣區國際臨床試驗所提供技術支援。該試驗所由香港特別行政區政府設立及擁有，負責推動生物醫藥產業發展，其附設於中央援港應急醫院的生物樣本庫，可儲存超過40萬個血液、細胞和去氧核糖核酸樣本。

我們也支援醫院管理局（醫管局），在落馬洲中央援港應急醫院推出新的眼內注射服務。我們協助改裝病房的機電系統，以配合這項新服務。



（左）機電署改建中央援港應急醫院的病房，以支援醫管局推出的眼內注射服務，紓緩公立醫院的壓力。

（右）中山大學中山醫學院的專家團隊在2024年11月到訪中央援港應急醫院，與醫管局就利用中央援港應急醫院提供眼科服務交流經驗及意見。

（Left）To ease pressure on public hospitals, the EMSD converted a ward at the CGAEH to support intravitreal injection services launched by the HA.

（Right）An expert team from Sun Yat-sen University's Zhongshan School of Medicine visited the CGAEH in November 2024 and exchanged experience for the provision of ophthalmology services at the CGAEH.

粵港澳大灣區國際臨床試驗所為醫藥研發提供一站式臨床試驗平台，由機電署負責為該試驗所的機電設施提供全面維修保養服務。我們為生物樣本庫的液氮樣本貯存室安裝氧氣水平監測系統，確保實驗室安全運作。

The GBA International Clinical Trial Institute provides a one-stop clinical trial platform for pharmaceutical research and development, and the EMSD is responsible for offering comprehensive maintenance services to its E&M facilities. We ensure safe laboratory operations by installing oxygen level monitoring system in the Liquid Nitrogen Storage Room of the Biobank.



GEARED UP FOR FURTHER TRANSFORMATION

In support of Hong Kong's ongoing transformation, the EMSTF fosters deeper collaboration with Mainland partners to enhance service quality. Through comprehensive training and digitalised workflows, the Department is committed to improving operational efficiency and advancing intelligent E&M across the region.

Supporting Greater Bay Area Collaboration

Collaboration with cities in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) is one of our strategic priorities. A notable example is our support for the GBA International Clinical Trial Institute, established and owned by the Hong Kong Special Administrative Region Government, at the Hong Kong Park of the Hetao Shenzhen-Hong Kong Science and Technology Innovation Co-operation Zone. The Institute, which facilitates the development of the biomedical technologies industry, can store over 400 000 samples of blood, cells and DNA at its affiliated biobank at the Central Government-aided Emergency Hospital (CGAEH) in Lok Ma Chau.

We also provided technical support to the Hospital Authority (HA) in launching a new intravitreal injection services at the CGAEH. We helped convert a ward by modifying the E&M system to accommodate the new service.

憑藉豐富的醫院維修保養服務經驗，我們成功支援東區尤德夫人那打素醫院和威爾斯親王醫院，分別在2024年10月和12月接受深圳市衛健醫院評審評價研究中心的認證評審。兩間醫院成為本港首批獲得《國際醫院評審認證標準（中國）》（2021版）認證的公立醫院。我們的認證知識和普通話能力對認證過程大有助益，備受客戶讚賞。我們期望日後能協助更多醫管局醫院和其他客戶場地取得內地認證。

近年，我們的技術團隊與大灣區機構通力合作，制訂統一標準。《機電設備人工智能數據標準化指南》首個版本已經完成，並於廣州最先進的羊城晚報嶺南數字創意中心興建期間進行試點應用。

新合作備忘錄和交流活動

繼與多個內地機構簽署合作備忘錄後，機電署在去年12月舉行的機電工程署研討會2024上，與廣州市科學技術協會簽訂新合作備忘錄，共同推動政府部門應用創新科技（創科）。與此同時，我們的策略業務單位亦舉辦多項大灣區交流活動，包括於2025年2月到訪廣東順德，與非營利性三級綜合醫院和祐醫院交流經驗。我們也參與2024年11月在浙江杭州舉行的第11屆ACM節能建築、城市與運輸系統國際會議，發表技術論文與分享經驗。

迎接人工智能與智能機電

為使員工具備人工智能與智能機電時代所需的技能和思維，我們根據機電署的《人工智能行動綱領》推出一系列培訓項目，包括為首長級至督察級人員開辦人工智能課程，並計劃為其他職級同事提供相類培訓。

Experienced in providing hospital maintenance services, we successfully supported the Pamela Youde Nethersole Eastern Hospital (PYNEH) and the Prince of Wales Hospital (PWH) in the accreditation surveys conducted by the Shenzhen Hospital Accreditation Research Centre in October and December 2024 respectively. Both PYNEH and PWH have become the first batch of public hospitals in Hong Kong accredited under the China's International Hospital Accreditation Standards (2021 Version). The client appreciated our accreditation knowledge and Putonghua skills, which greatly facilitated the accreditation process. We look forward to supporting more HA hospitals, and other client venues in securing Mainland accreditation in future.

In recent years, our technology team has been working closely with GBA entities to develop harmonised standards. The first version of the E&M AI Data Standardisation Guideline is now complete. It was piloted during the construction of the state-of-the-art Yangcheng Evening News Lingnan Digital Creative Centre in Guangzhou.

New MoC and More Exchanges

Building on existing Memoranda of Co-operation (MoC) with Mainland entities, the EMSD signed a new MoC with the Guangzhou Association for Science and Technology during the EMSD Symposium 2024 in December to jointly support government departments in applying innovation and technology (I&T). Meanwhile, our Strategic Business Units (SBUs) organised several GBA exchange activities, including an experience-sharing visit to Heyou Hospital, a non-profit tertiary general hospital in Shunde, Guangdong, in February 2025. We also took part in the 11th ACM International Conference on Systems for Energy-Efficient Buildings, Cities, and Transportation held in Hangzhou, Zhejiang, in November 2024 to present technical papers and share experiences.

Getting Ready for AI and Intelligent E&M

To equip staff with the skills and mindset required for the age of artificial intelligence (AI) and intelligent E&M, we launched an array of training initiatives aligned with the EMSD AI Master Action Plan. These included AI courses for staff from Directorate to Inspectorate grade, with similar training planned for other tiers.

在機電工程署研討會2024上，機電署與廣州市科學技術協會簽署合作備忘錄，以加強兩地交流合作，推動科技創新。

At the EMSD Symposium 2024, the EMSD signed an MoC with the Guangzhou Association for Science and Technology to strengthen exchange and co-operation between the two places and promote technological innovation.



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鑑於未來數年會有多家新建或重建的醫管局醫院陸續投入服務，我們已開始部署，以應對預期的人力需求高峯。我們透過多渠道加強操作與維修保養人員的招聘工作，包括增聘見習技術員和退休同事，並開設新職級以吸納非公務員合約員工。

為提升我們在衛生工程領域的實力，我們與香港大學專業進修學院合作，於2025年第一季推出兩項文憑課程，分別為生物醫學工程技術員和醫院工程技術員而設。我們也於2025年2月舉辦蒸汽鍋爐安裝培訓，並計劃加入更多創科元素，吸引年輕同事參與。

為進一步提升醫院維修保養服務的質素，我們成功把ISO 13485品質管理系統的認證範圍擴展至手術室和消毒設備。在部門層面，我們取得首項ISO 27701隱私資訊管理系統認證，涵蓋新開發的電子問卷平台，以及部分涉及收集個人資料的工作流程系統。

創科在提升內部工作流程方面潛力龐大。繼2023年成功把所有生物醫學設備的紙本維修保養表格遷移至醫療儀器維修表格電子平台後，我們計劃在2025年試行把手術室和消毒設備的紙本維修保養表格整合至該電子平台，以提升效率並實現報告無紙化。

與此同時，我們正在研發招標評估輔助系統，透過電子平台系統縮短擬備和評估標書時間，從而提升員工生產力。部分策略業務單位已開始應用大型語言模型，協助撰寫簡報、意見書和演講稿，再由人手編輯和修訂。

With multiple new or redeveloped HA hospitals scheduled to open in the coming years, we have begun arrangements to meet the anticipated peak in manpower demand. Recruitment of operation and maintenance staff has ramped up through multiple channels, including hiring more Technician Trainees and retired colleagues and creating new ranks to incentivise Non-Civil Service Contract staff.

To sharpen our health sector capabilities, two diploma courses, one for biomedical engineering technicians and the other for hospital engineering technicians, were launched in partnership with the University of Hong Kong's School of Professional and Continuing Education in the first quarter of 2025. We also conducted training on steam boiler installation in February 2025, with plans to incorporate more I&T elements to attract younger colleagues.

To further enhance the quality of our hospital maintenance services, we successfully extended the certification scope of our ISO 13485 Quality Management System to include operating theatre and sterilisation equipment. At the departmental level, we achieved our first-ever ISO 27701 Privacy Information Management System certification, covering the new eSurvey platform and selected workflow systems involving personal data collection.

I&T offers great potential for internal workflow enhancement. Further to the successful migration of all paper-based biomedical equipment maintenance forms to the Biomedical Engineering Services (BES) e-form platform in 2023, we are now planning to pilot the integration of the paper-based maintenance forms for operating theatre and sterilisation equipment onto the BES e-form platform in 2025 for higher efficiency and paperless reporting.

Meanwhile, we are now developing a Tender Assessment Assistance System, an e-platform system designed to shorten the duration of tender preparation and assessment, thereby boosting staff productivity. Some SBUs have begun using Large Language Models to assist in drafting presentations, submissions and speeches for subsequent manual editing and refinement.



我們的ISO 13485品質管理系統認證範圍已成功擴展至手術室和消毒設備。此外，我們計劃把這些設備整合至醫療儀器維修表格電子平台，以提供優質的維修保養服務。

The certification scope of our ISO 13485 Quality Management System has been successfully extended to include operating theatre and sterilisation equipment. Also, we plan to integrate the equipment into the BES e-form platform to provide high-quality maintenance services.



機電署已取得ISO 27701隱私資訊管理系統認證，涵蓋全新的電子問卷平台和其他工作流程系統，確保個人資料安全，並加強網絡安全防禦能力。

The EMSD has attained ISO 27701 Privacy Information Management System certification, which covers the new eSurvey platform and other workflow systems, ensuring personal data security and strengthening our cybersecurity defence capabilities.

維修政府車輛 肩負使命與責任

MAINTAINING GOVERNMENT VEHICLES
SHOULDERING MISSION AND RESPONSIBILITY

保安及車輛工程處為超過九成的政府車輛提供維修服務。要確保行車安全和服務質素，背後少不了一羣技藝純熟的技術人員，其中包括二級技術員謝俊傑(阿傑)。阿傑在為期四年的學徒訓練中默默耕耘，曾在職業訓練局舉辦的「2024最佳汽車學徒比賽」中榮獲「汽車機械/電工」組別冠軍。

The Security and Vehicle Services Division provides maintenance services for over 90% of government vehicles. To ensure road safety and service quality, it relies on a team of skilled technicians. Mr Tse Chun-kit (Kit), a technician II, is one of them. Diligently completed the four-year apprenticeship, Kit was the Champion in the Vehicle Mechanic/Electrician Group in the 2024 Best Apprentice Competition organised by the Vocational Training Council.



阿傑在2020年加入機電署，成為汽車見習技術員。他表示，早在中三時已有意投身汽車維修行業，惟未能如願報讀相關課程。直到中六畢業，得知機電署開辦技術員訓練計劃，便決定報名。「機電署訓練計劃最大的吸引力，在於能接觸不同類型的政府車輛，這是一般學徒訓練計劃難以提供的寶貴機會。」

學徒訓練初期，阿傑被派往寶馬汽車(香港)有限公司實習。當時的他猶如一張白紙，面對陌生環境，一度萌生放棄念頭。幸而他堅持下來，細心觀察，並向師傅虛心請教，終於逐步掌握維修汽車的技巧。在師傅指導下，他能獨自完成更換機油和磨損零部件，以及維修引擎和底盤等工作。完成14個月實習後，他回到機電署，專注學習維修救護車。

阿傑認為，雖然救護車配備閃燈，而一般車輛則沒有，但從技術角度來看，兩者在維修方面並無太大差異。真正的分別，在於他對維修救護車多了一份責任感。他說：「救護車是救命工具，運送病人途中若發生故障，後果不堪設想。全港市民都有機會使用救護車，你無法預料你的親人會否登上救護車。」正因如此，機電署為救護車零部件設定使用期限，定期更換，這與私家車在出現故障時才更換零部件的做法截然不同。

阿傑完成機電署的實習後，再獲派往斯堪尼亞(香港)有限公司學習重型貨車維修技術。歷經多方面的汽車維修訓練，他獲機電署提名參加「2024最佳汽車學徒比賽」。備賽期間，他學習處理較複雜的汽車故障情況，進一步提升維修技能。最終成功奪冠，阿傑視此為對其四年來努力的肯定。

雖然學徒訓練已經結束，但學習汽車維修永不止步。阿傑說：「汽車技術發展一日千里，電動車和新能源汽車不斷推陳出新，我們必須時刻更新知識，提升技能，才能跟上行業步伐。」

Kit joined the EMSD in 2020 as a vehicle technician trainee. He shared that he intended to enter the vehicle maintenance industry since Secondary three, but was unable to enrol in a relevant course at that time. After completing Secondary six, he learned about the EMSD's Technician Training Scheme and decided to apply. "The biggest appeal of EMSD's training scheme is the opportunity to work on various types of government vehicles, a valuable experience normally not available in other apprenticeship schemes."

At the beginning of his apprenticeship, Kit was assigned to the BMW Concessionaires (Hong Kong) Limited for practical training. He was like a blank slate, and the unfamiliar environment once made him consider giving up. Yet, he persevered. By observing carefully and humbly seeking guidance from his mentor, he gradually mastered the skills of vehicle maintenance and repair. Under the guidance of his mentor, he was able to independently perform tasks such as engine oil changing, replacing worn parts and repairing engines and chassis. After 14 months of training, he returned to the EMSD, where he specialised in ambulance maintenance.

Kit noted that although ambulances are equipped with flashing lights while general purpose vehicles are not, there is not much difference in their maintenance from a technical perspective. The real difference lies in his sense of responsibility when working on ambulance maintenance. He said, "Ambulances are life-saving tools. If a malfunction occurs while transporting a patient, the consequences could be dire. Every citizen in Hong Kong may need an ambulance, you never know if your loved ones may be on board one day." For this reason, the EMSD sets a limit on the service life of the parts of ambulances and replaces them regularly, unlike the practice for private cars of which the parts are usually replaced only when they are faulty.

Upon completion of his internship at the EMSD, Kit was rotated to Scania (Hong Kong) Limited to acquire the skills of maintaining heavy goods vehicles. Having received various training in vehicle maintenance, he was nominated by the Department to participate in the 2024 Best Apprentice Competition. When preparing for the competition, he studied how to handle more complicated vehicle faults, further honing his skills in vehicle maintenance. Ultimately, he won the Champion in the competition, which he saw as a recognition of his efforts over the past four years.

Though his apprenticeship has concluded, learning vehicle repair is a lifelong journey. "Automobile technology is evolving rapidly. With the constantly emerging electric and new energy vehicles, we must continuously update our knowledge and skills to keep pace with the industry," said Kit.

企業管理
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2024/25年度對機電署來說是成果豐碩的一年。我們在運用人工智能等創新科技(創科)提升工作效率方面取得長足進展，同時也堅守原則，盡心盡力提供公共服務。這一年亦是我們推行營運基金第三個五年策略計劃(第三個計劃)的第二個年頭。我們朝著「機電3.0 — 智能機電」的願景和「加強多方協作，運用創新科技，創造公眾價值，同心建社惠民」的企業目標邁進，進展良多。

營運基金自1996年成立以來，發展成績有目共睹。從早期掙扎求存，到轉型蛻變為以客為本的機構，營運基金現已成為政府的「創新促成者」，並在推動創科與連繫各持份者方面發揮先導作用。我們期待明年與所有客戶和持份者一同慶祝營運基金成立30周年。

客戶服務更臻卓越

營運基金年內一項重要成就是客戶滿意度續創佳績，在2024年年底進行的兩年一度客戶意見調查顯示，以8分為滿分計，客戶滿意指數達7.27分，整體服務競爭力指數達7.38分，雙雙創下歷來新高。是次調查回覆率高達64%，我們正積極跟進調查識別出需予改善的地方，以進一步提升服務質素。

我們應用各項創科方案持續提升服務效率。舉例來說，我們於2024年10月推出「幫緊你維修」流動應用程式，方便客戶網上提交維修保養要求和查詢進度，標誌着客戶服務數碼化的里程碑。未來我們計劃引入人工智能語音機械人系統，自動回應公眾查詢和客戶故障報告。

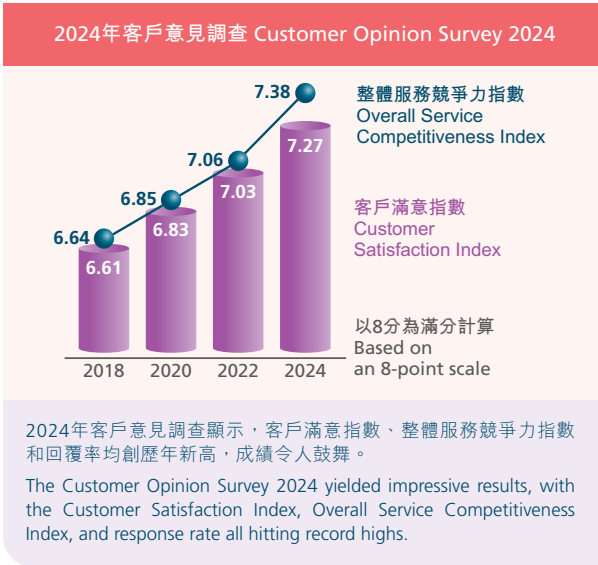
The year 2024/25 was fruitful for the EMSD as we made major strides in leveraging innovation and technology (I&T), such as artificial intelligence (AI), to advance our work while staying principled in our commitment to public service. It also marked the second year of the EMSTF's third Five-year Strategic Plan (the third Plan), during which we made solid progress towards the vision of "E&M 3.0 – Intelligent E&M" and the corporate goal of "creating public value for community betterment together through strengthening collaboration between various parties and leveraging innovation and technology".

Since its establishment in 1996, the EMSTF has come a long way. From struggling for survival in the early years to undergoing a phase of customer-focused transformation and growth, it has now emerged as an Innovation Facilitator for the Government and a pioneer in I&T initiatives and stakeholder engagement. We look forward to celebrating the 30th anniversary of the EMSTF together with all our clients and stakeholders next year.

ENHANCING CUSTOMER SERVICE EXCELLENCE

A key achievement of the EMSTF during the year was record-high customer satisfaction. The biennial Customer Opinion Survey (COS) conducted in late 2024 showed a Customer Satisfaction Index of 7.27 and an Overall Service Competitiveness Index of 7.38 on an 8-point scale, both marking historic highs. With an impressive 64% response rate, the COS identified areas for continuous improvement, which we are actively addressing to further enhance service quality.

We have applied an array of I&T solutions to continuously improve our service efficiency. For example, in October 2024, we launched the EMSD Client Portal, a mobile application (app) for convenient online submission of maintenance requests and progress tracking by clients. It marks a milestone in the digitalisation of our customer service capabilities. Future plans include incorporating an AI-powered voicebot system to address public enquiries and clients' fault reports automatically.



我們在2024年10月舉行第三個計劃策略工作坊，探討如何應用新質生產力的概念，加快推展計劃下的策略行動。
We held the third Plan Strategic Workshop in October 2024 to explore how the concept of new quality productive forces could be applied to accelerate the implementation of various strategic tasks under the Plan.

我們推出「創科之旅」活動，讓有興趣的學校和機構組團參觀機電署總部大樓的「機電創科專區」，了解本署的創科成果。年內我們為客戶部門舉辦14次「創科之旅」，超過250人參與。

We launched the InnoTours programme for visiting groups from interested schools and organisations to tour around the InnoZone at the EMSD Headquarters Building, where they could learn about our I&T achievements. During the year, 14 InnoTours were organised for client departments, with over 250 participants.



為協助客戶應用更多創科方案，我們舉辦了14次「創科之旅」，邀請超過250名客戶部門代表參觀機電署總部大樓的「機電創科專區」，向他們展示機電署與學術及科研機構合作成功開發的多個創科項目。

To support clients' adoption of more I&T solutions, we organised 14 InnoTours to our E&M InnoZone at the EMSD Headquarters for more than 250 participants from client departments, and showcased various successful I&T projects developed in collaboration with academic and research institutions.

我們更主動接觸客戶，並舉辦專題研討會，以深入了解客戶的創科需要和日常營運遇到的問題。例如，我們於7月與香港機場管理局(機管局)在機場行政大樓合辦2024年機管局創新與科技交流會。機電署代表在會上與百多位機管局員工和持份者分享署方獲獎的創科項目和實踐經驗。

Besides, we actively engaged with clients and held in-depth seminars to better understand their I&T needs and pain points in daily operations. For instance, we co-organised with the Airport Authority Hong Kong (AAHK) the AAHK Innovation and Technology Seminar 2024 in July at the Hong Kong International Airport Tower, where EMSD representatives shared our award-winning I&T projects and implementation experiences with over 100 AAHK staff members and stakeholders.

此外，「機電創科網上平台」新增的「機電創科彙集」已於2024年7月正式推出，詳細介紹機電署成功試驗且具產業化潛力的創科項目，為有意推行數碼化的客戶提供實用參考。

Moreover, the E&M InnoCatalogue, a new feature on our E&M InnoPortal, was officially launched in July 2024. It provides detailed information on EMSD-piloted I&T projects with commercialisation potential, serving as a practical reference for clients in their digitalisation initiatives.



2024年，我們舉辦三場創新技術應用研討會暨工作坊，向客戶推廣人工智能、機械人、無人機和「機電裝備合成法」等不同創科應用方案。

In 2024, we organised three seminars cum workshops on the application of innovative technologies to promote various I&T solutions to our clients, such as AI, robotics, drones and MiMEP.

獎項與嘉許

年內，我們的策略業務單位憑藉創科項目的卓越成果，榮獲多個本地和國際獎項。此外，機電署員工和企業支援單位在公共服務、專業成就、創科發展和知識管理方面也屢獲殊榮。

Awards and Accolades

During the year, our Strategic Business Units (SBUs) won numerous local and international awards for their outstanding I&T project achievements. EMSD staff and corporate support units also garnered multiple awards in public service, professional achievement, I&T development and knowledge management.

企業管理

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前機電署署長彭耀雄先生獲頒授銀紫荊星章，以表揚他多年來盡心竭力為政府和香港市民服務，表現傑出。此外，署內三位人員獲頒2024年公務員事務局局長嘉許狀，以表揚他們對部門的卓越貢獻；一位前總工程師獲頒2024年行政長官公共服務獎狀，以嘉許其傑出表現；另有兩位人員榮獲2024年申訴專員嘉許獎公職人員獎，以表彰其在客戶服務方面的優秀表現。

部門多位年輕員工也因其專業成就而獲獎。一位見習技術員在職業訓練局（職訓局）舉辦的2024年傑出菁英練習生獎勵計劃榮獲傑出菁英練習生獎，另有兩位見習技術員獲得優異菁英練習生獎。此外，一位見習工程師奪得香港工程師學會的2024年傑出見習工程師獎第三名，而另一位工程師則憑藉在「ChillStream®」項目的貢獻，在工程及科技學會香港分會的2024年青年科技專才展覽及比賽中贏得公開組亞軍。

其中一個企業支援單位負責的「革新機電項目交付方法」可行性研究項目，旨在探討建築資產生命周期中應用開放式建築信息模擬（open BIM）技術。該項目在2024年6月率先奪得「2024年香港開放式建築信息模擬/開放式地理信息系統比賽」的「技術解決方案組別」大獎，繼而在幾個試驗場地獲進一步證明相關方法和自動化工具屬切實可行後，便以「改變機械、電氣和管道項目交付方法」為題發表研究成果，並於10月在摩洛哥榮獲buildingSMART International的「openBIM Awards 2024」「項目交付組別」大獎。這是香港特別行政區政府（特區政府）在該項國際賽事贏得的首個大獎，彰顯我們在機電資產管理和交付工作流程應用open BIM技術的實力。



在傑出菁英練習生獎勵計劃頒獎典禮上，本署時任見習二級技術員（空氣調節）陳彥霖女士（右二）獲頒發傑出菁英練習生獎，並分享其受訓經歷。
At the Outstanding Apprentice Award Presentation Ceremony, Miss Chan Yin-lam (2nd right), then Technician Trainee II (Air-conditioning), received the Outstanding Apprentice Award and shared her training experience.

Mr Pang Yiu-hung, former Director of Electrical and Mechanical Services, was awarded the Silver Bauhinia Star in recognition of his dedicated service to the Government and Hong Kong community over the years. Additionally, three EMSD officers were honoured with the Secretary for the Civil Service's Commendation Award 2024 for their excellent contributions to the Department, while one former Chief Engineer was awarded the Chief Executive's Commendation for Government/Public Service 2024 for his outstanding performance. Two colleagues received the Ombudsman's Awards 2024 for Officers of Public Organisations in recognition of their excellent customer service.

Younger colleagues also won awards for their professional achievements. One EMSD Technician Trainee (TT) received the Outstanding Apprentice Award and two TTs received the Merit Apprentice Award in the Outstanding Apprentice Award Scheme 2024 organised by the Vocational Training Council (VTC). One of our Engineering Graduates won the Third Prize of the Trainee of the Year Award 2024 organised by the Hong Kong Institution of Engineers, while one engineer was the First Runner-up in the Open Section of the Young Professionals Exhibition and Competition 2024 organised by the Institution of Engineering and Technology Hong Kong for her contribution to the ChillStream® project.

A feasibility study project titled "Revolutionising Handover Practices for E&M Projects" undertaken by one of our corporate units, exploring the use of open BIM (Building Information Modelling) in the built asset life cycle, first won the Grand Award in the Technology Solution Category of the Hong Kong openBIM/openGIS Awards 2024 in June 2024. Followed by further validation of the methodology and automation tools at trial venues, its findings were presented under the title "Transforming MEP Project Handover Practices". The project then received the Grand Award in the Handover Category of the openBIM Awards 2024 organised by buildingSMART International in October in Morocco. This marks the first grand award won by the Hong Kong Special Administrative Region Government (HKSAR Government) in this international competition, recognising our open BIM capabilities in E&M asset management and handover workflow.



生物醫學工程師葉子愨女士（左）憑藉「ChillStream®」項目在2024年青年科技專才展覽及比賽中獲得公開組亞軍。
Ms Ip Tsz-yan, Jenny (left), a biomedical engineer, won the 1st Runner-up in the Open Section of the Young Professionals Exhibition and Competition 2024 with the ChillStream® project.

知識管理是第三個計劃的策略行動之一。我們很榮幸於2024年10月獲得2024年香港最具創新力知識型機構大獎，再於2025年1月獲頒2024年全球最具創新力知識型機構大獎。這些獎項肯定了我們運用企業知識管理開發創新方案和提供優質服務方面的成就。

Knowledge management is one of the strategic tasks in the third Plan. We were honoured as the Winner of the Hong Kong Most Innovative Knowledge Enterprise (MIKE) Award 2024 in October 2024, followed by the Global MIKE Award 2024 in January 2025. Both awards highlighted our achievements in leveraging enterprise knowledge management to develop innovative solutions and deliver superior services.



機電署連續三年榮獲香港最具創新力知識型機構大獎和全球最具創新力知識型機構大獎，充分印證部門在推動創新文化和知識管理方面的努力與成果，備受本地和國際肯定。
The EMSD has received the Hong Kong MIKE Award and the Global MIKE Award for three consecutive years, a testament to our effort and achievements in fostering innovation culture and knowledge management, gaining recognition both locally and internationally.

優化內部程序和工作流程

此外，我們一直善用創科以簡化和改善主要辦公室職能的工作流程。年內的一個例子，是我們繼在2021/22年度成功為專業職系推出電子評核系統後，把該系統擴展至督察和技術主任職系。另一例子是我們全面採用電子方式招聘合約工程師（機電），以配合電子政府政策，推行服務數碼化。這項安排可縮短處理職位申請的時間，並提高資料保存的準確度，從而提升整體招聘效率。與此同時，我們已全面改革現有的工程監督系統，推出機電署數碼工程監督系統，以減少人手錯誤，杜絕紙本流程所引致的延誤。新系統具備實時數據追蹤功能，實現工程監督數碼化，並簡化工作流程，協助員工迅速作出明智的決定。

OPTIMISING INTERNAL PROCESSES AND WORKFLOWS

We have also been leveraging I&T to streamline and improve the workflows of major office functions. An example this year was the extension of the e-appraisal system to Inspectorate and Technical Officer grades, building on its successful implementation for Professional grades in 2021/22. Another example was the full adoption of e-application for the recruitment of Contract Engineers (Electrical and Mechanical) in support of service digitalisation under the e-Government initiatives. This arrangement has shortened the processing time for job applications and improved accuracy in data maintenance, leading to greater recruitment efficiency. Meanwhile, we have overhauled the existing works supervision system with the launch of the EMSD's Digital Works Supervision System to minimise manual errors and eliminate delays caused by paper-based processes. Featuring real-time data tracking, the new system digitalises supervision and streamlines workflows for faster and better decision-making.

高效的採購和物料管理等後勤支援服務，有助策略業務單位為客戶提供更佳服務。我們持續革新物料管理工作流程，並於2025年3月推出全新的常用物料管理系統。此外，我們計劃在2025年第三季實施經改良的採購訂單和物料流動程序，優化現有工作流程和避免重複作業。我們亦正設計新的採購流程系統，能自動輪流邀請相關供應商並進行數碼化審批，預計於2025/26年度推出。

Effective procurement and stores management in logistics support can facilitate our SBUs in serving clients better. We have been innovating the stores management workflow, culminating in the launch of a new Working Stores Management System in March 2025. Besides, an enhanced set of purchase order and goods movement processes aiming to optimise the existing workflow and eliminate repetition is scheduled to be operational in the third quarter of 2025. We are also designing a new Procurement Workflow System for automatic supplier selection by rotation and digital approvals, scheduled for launch in 2025/26.

堅守原則

儘管我們借助創科取得良好進展，並掌握眾多機遇，但我們一如既往恪守安全、誠信和承擔等公共服務重要原則，其中，我們高度重視數據安全和保障私隱。

數據安全

為符合特區政府最新的資訊保安要求，我們迅速研發並推出替代工具和系統，以加強員工、客戶和承辦商之間的溝通安全，例子包括「EMSD Messenger」和「顧客為本電子平台留言版」，兩者提供了安全的渠道，分別用於部門內部溝通和與承辦商溝通，數據均儲存在機電署的內部伺服器。另一例子是「大型檔案共享平台」，這個安全平台用作與外部人士分享檔案，並具備嚴密的保安功能，例如數據加密、雙重身分驗證和自動刪除數據功能，確保符合相關的資料保存政策。

我們也推出了電子問卷平台，讓機電署員工透過部門的內聯網，安全地建立專業的電子表格和問卷，然後發布到互聯網上收集數據。這個安全平台無需使用公共雲端服務來儲存敏感資料，並具備靈活問卷設計、即時數據收集、實時數據存取和自動分析工具等功能，不但符合政府的保安規約，用途亦非常廣泛，由籌辦活動以至管理巡查記錄等都能大派用場。

誠信至上

本署不遺餘力向員工推廣誠信，提高他們對貪污風險的警覺。政府於2024年6月頒布更新版《公務員守則》後，我們為員工安排多場簡介會，廣泛宣傳該守則。部門除了經常透過員工通訊和電郵向全體人員強調誠信和防貪原則外，還定期為員工和承辦商舉辦有關防貪的入職課程、研討會和培訓。我們還實行每五年的誠信培訓周期，為負責採購物料、服務及選擇承辦商的人員，以及負責監督和管理顧問

STAYING PRINCIPLED

While we have made good progress and seized numerous opportunities with the aid of I&T, we stay true as always to important principles of public services such as security, integrity and commitment. A case in point is data security and privacy protection, which we take very seriously.

Data Security

To comply with the HKSAR Government's latest information security requirements, we have promptly developed and launched alternative tools and systems to strengthen secure communication among staff, clients and contractors. Examples include the EMSD Messenger and the Customer Centric e-Platform Message Board, both of which provided a secure means for internal communication and interactions with contractors, with data stored on the EMSD on-premise servers. Another example is the Easy Sharing System, a secure platform for file sharing with external parties built with robust security features such as data encryption, two-factor authentication and automated data erasure to ensure compliance with relevant data retention policies.

We have also launched the eSurvey platform for EMSD staff to create professional electronic forms and surveys securely via the Departmental Intranet and then publish them online for data collection. This secure platform, which eliminates reliance on public cloud services for storing sensitive information, features functions like flexible questionnaire design, instant data collection, real-time data access and automated analysis tools, making it ideal for applications ranging from organising events to managing inspection records, all while adhering to government security protocols.

Integrity First

We spare no effort in promoting integrity among staff and raising their awareness of corruption pitfalls. Following the Government's promulgation of the updated Civil Service Code in June 2024, we arranged a number of briefing sessions for staff to ensure the widest dissemination of the Code. In addition to frequent communication with all staff via newsletters and emails emphasising integrity and anti-corruption principles, we regularly conducted induction programmes, seminars and training on corruption prevention for both staff and contractors. We have also adopted a five-year integrity training cycle that offers refresher courses to officers responsible for procurement of stores, services and



我們安排員工參觀國家安全展覽廳，提升他們對國家發展和國家安全的認識。
We arranged visits for staff to the National Security Exhibition Gallery to enhance their understanding of national development and national security.

公司、承辦商和供應商的人員，提供誠信複修課程。

提高國家安全意識

國家安全始終是重中之重。為履行這項承諾，機電署署長於2024年12月率領部門高層管理人員，參觀香港歷史博物館的國家安全展覽廳，以加深對國家安全事宜的了解和認識。此外，我們定期安排參觀活動，確保所有機電署公務員遵守公務員事務局的规定，於2026年年底至少參觀展覽廳一次。

人才與青年發展

招聘與培訓

「建構創新卓越團隊」是第三個計劃提出的其中一項策略。有見人力市場競爭激烈，我們加快了見習工程師的整體招聘流程，並於2025年年中有條件錄取優秀求職者。此外，部門於2024年就技工招聘工作推行試驗計劃，容許即將完成正式學徒訓練的申請人在同年的招聘活動中申請相關技工職位。此舉既可擴大人才庫，又能提升員工士氣。

去年，我們在香港和粵港澳大灣區（大灣區）舉辦了多個技術和專業培訓課程。在與大灣區機構聯合培訓方面，例子有2024年4月與廣州市技師學院合辦的低壓電工特種作業培訓班，共有22名機電署技術人員到廣州參與為期13天的培訓課程。



2024年7月至8月，本署訓練組聯同廣州四間技術員培訓學院舉辦有關空調製冷、電氣工程、屋宇裝備和電動車的實操培訓班，內容涵蓋技術課程、參觀企業和文化交流活動。
Between July and August 2024, our Training Unit collaborated with four technician training colleges in Guangzhou to organise practical training courses on refrigeration and air-conditioning, electrical works, building services and electric vehicles. The courses covered technical sessions, company visits and cultural exchange activities.

自機電署在2018年和2020年與廣州市人力資源和社會保障局簽署兩份合作備忘錄，以促進兩地的機電培訓合作以來，本署許多人員已參加廣州各個技術員培訓學院開辦的培訓課程。2024年，共有68名機電署見習技術員在廣州接受培訓，內容涵蓋空調製冷、電氣工程、屋宇裝備和汽車維修等專業。

contractors, as well as those overseeing the supervision and management of consultants, contractors and suppliers.

Raising National Security Awareness

National security remains a top priority. To reinforce this commitment, the Director of Electrical and Mechanical Services led senior management in a visit to the National Security Exhibition Gallery at the Hong Kong Museum of History in December 2024 for a deeper understanding and awareness of national security issues. Furthermore, regular visiting sessions have been scheduled to ensure that all civil servants of the EMSD comply with the requirement of the Civil Service Bureau (CSB) to visit the Gallery at least once by the end of 2026.

TALENT AND YOUTH DEVELOPMENT

Recruitment and Training

“Building an innovative and excellent work team” is one of the strategies outlined in the third Plan. In view of the competitive manpower market, we have expedited the overall process of the Engineering Graduate recruitment exercise, making conditional offers to top candidates in mid-2025. A trial scheme was also launched for Artisan recruitment in 2024, under which candidates approaching completion of full apprenticeship may apply for relevant Artisan posts in the recruitment exercises of the same year. This initiative has enlarged the talent pool and boosted staff morale.

The past year saw plenty of our technical and professional training programmes in Hong Kong and the Guangdong-Hong Kong-Macao Greater Bay Area (GBA). As for joint training with GBA entities, an example was the Training Course on Special Operation for Low Voltage Electrical Installation, co-organised with the Guangzhou Technician College in April 2024, where 22 EMSD technical officers took part in a 13-day training course held in Guangzhou.

Since the signing of two Memoranda of Co-operation (MoC) between the EMSD and the Guangzhou Municipal Human Resources and Social Security Bureau in 2018 and 2020, aiming to deepen collaboration on E&M training in both places, many EMSD officers have participated in training courses provided by various technician training colleges in Guangzhou. In 2024, a total of 68 TTs of the EMSD received training covering professional fields like refrigeration and air-conditioning, electrical works, building services and vehicle maintenance in Guangzhou.

企業管理

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我們也舉辦交流活動，例如2024年10月獲廣東省科學技術協會支持的大灣區創科考察團。該活動由機電署與灣仔民政事務處合辦，共有170名來自香港12間學校的學生參加，參觀廣東省東莞市的創科設施，讓學生有機會了解國家的最新發展，並探討應用相關科技提升本地社區生活質素的可行性。

另一亮點是我們於2024年首次與清華大學經濟管理學院合作，在深圳舉辦兩個為期三天的首長級人員管理培訓課程。該課程提供有關創科、碳中和與先進管理策略的寶貴見解，大大增進學員對內地和大灣區新興趨勢的認識。兩個課程共有85名來自機電署及其他工務部門的首長級人員參與，彰顯他們對持續學習和卓越領導的承諾。

青年發展

青年發展對機構的成長和可持續發展至關重要。我們繼續參與一年一度的「機電·啟航」活動，鼓勵年輕人加入本地機電業。「機電·啟航」2024迎新典禮於2024年11月假香港會議展覽中心舉行，約有1 100名青年才俊和業界代表出席，人數創下新高。



機電署聯同香港機電業推廣工作小組舉辦「機電·啟航」2024迎新典禮，以吸引年輕人投身機電業。

The EMSD, together with the Hong Kong Electrical and Mechanical Trade Promotion Working Group, held the “E&M GO!” orientation ceremony 2024 to attract young people to join the E&M industry.

第47屆世界技能大賽(世賽)於2024年9月在法國里昂舉行，機電署兩名年輕見習技術員分別參加「空調製冷」和「電氣安裝」項目比賽。另有一名年輕見習技術員是世賽香港代表選拔賽「汽車噴漆」項目中三名優勝者之一，我們安排他跟隨代表團觀摩高技術參賽者在世界級賽事中的優秀表現，藉此激勵其他新晉見習技術員努力奮鬥，參與將來的世賽。全賴廣州的合作備忘錄伙伴鼎力支持，與我們緊密合作提供培訓，見習技術員得以大幅提升技能水平，同時拓展國際視野。

Exchange activities were also arranged, including the GBA I&T study tour in October 2024 supported by the Guangdong Association for Science and Technology. Jointly organised by the EMSD and Wan Chai District Office, the tour brought together 170 students from 12 Hong Kong schools to visit I&T facilities in Dongguan, Guangdong Province, from which they gained understanding of the latest developments of our country and explored the feasibility of applying relevant technologies to enhance quality of life in local communities.

Another highlight was our first collaboration with the Tsinghua University's School of Economics and Management to deliver two three-day management training programmes for directorate officers in Shenzhen in 2024. The programme provided valuable insights into I&T, carbon neutrality and advanced management strategies, significantly enriching the participants' understanding of emerging trends in the Mainland and the GBA. A total of 85 directorate officers from the EMSD and other works departments participated, underscoring their commitment to continuous learning and leadership excellence.

Youth Development

Youth development is vital to organisational growth and sustainability. We continued to participate in the annual “E&M GO!” event to encourage young people to join the E&M industry of Hong Kong. The “E&M GO!” orientation ceremony 2024, held in November 2024 at the Hong Kong Convention and Exhibition Centre, drew a record attendance of about 1 100 young talents and trade representatives.

Two of our young TTs competed in the Refrigeration and Air Conditioning and Electrical Installations trades respectively at the 47th WorldSkills Competition held in Lyon, France in September 2024. We also arranged for another young TT, one of the three winners of the Car Painting trade in the WorldSkills Hong Kong Competition, to accompany the delegation and observe the outstanding performances of highly skilled candidates in world-class competitions – a gesture of encouraging other new TTs to strive hard and participate in future WorldSkills Competitions. Thanks to our MoC partner in Guangzhou for their close collaboration with us on the provision of training, our TTs have greatly elevated their technical skills while broadening their global perspective.

同樣值得一提的，是我們參與了公務員事務局自2019年起舉辦的非華裔學生政府部門實習計劃。2024年的非華裔實習生來自厄瓜多爾，現於嶺南大學修讀數據科學，她獲安排在營運基金策略業務單位工作，協助開發「ChillStream®」人工智能項目。

與此同時，我們的機電青年發展委員會於2024年7月慶祝成立一周年。委員會繼續透過舉辦青年分享會，探討網絡安全和氣候變化等議題，推動青年發展工作。委員會也提名年輕員工到內地交流，例如參與2024建造業青年大灣區交流計劃。

來自厄瓜多爾的非華裔學生(左二)在機電署進行為期八星期的實習，期間到政府化驗所參觀。

An NEC student from Ecuador (2nd left) completed an eight-week internship at the EMSD, and visited the Government Laboratory during her internship.



Also worth mentioning was our participation in the Internship Programme for Non-ethnic Chinese (NEC) Students organised by the CSB since 2019. In 2024, an NEC intern from Ecuador currently studying data science at the Lingnan University, was assigned to an SBU of the EMSTF where she contributed to the development of the ChillStream® AI project.

Meanwhile, our E&M Youth Development Committee celebrated its first anniversary in July 2024 and continued to promote youth development through sharing sessions on topics such as cybersecurity and climate change. The Committee also nominated young staff for Mainland exchange activities, including the Construction Youth Exchange Programme in GBA 2024.



年青員工在2024年7月至8月參加由建造業議會舉辦的2024建造業青年大灣區交流計劃，到訪五個大灣區城市的建築和科技企業，其後在「青年交流平台」活動與部門同事分享所見所聞。

Young staff members participated in the Construction Youth Exchange Programme in GBA 2024 organised by the CIC from July to August 2024. They visited construction and technology enterprises in five GBA cities and subsequently shared their insights with department colleagues at the Youth Exchange Platform event.

工作環境滿關懷

機電署致力為全體員工提供關愛和健康的工作環境。我們於2024年8月在部門內聯網引入電子賀卡系統，促進員工之間的關懷和讚賞文化。此外，機電署的「E&M Connect」流動應用程式亦提供其他便捷工具，例如個人電腦支援平台、員工食堂電子訂餐，以及讓員工自行重設其機電署電腦開機帳戶密碼的功能。

為提倡自學風氣，我們於2024年12月推出線上學習平台，提供豐富教材，例如課後測驗和課程內容評估。員工可透過「E&M Connect」流動應用程式開設帳戶，登入平台以善用學習資源和技術資訊，以支援日常工作。

A Caring Workplace

The EMSD strives to provide a caring and healthy workplace for all staff. In August 2024, we introduced the e-Card system on our Departmental Intranet to foster a culture of care and appreciation among staff members. Besides, the EMSD mobile app, E&M Connect, also features a suite of convenient tools including personal computer help desk platform, staff canteen electronic ordering, and EMSD staff domain account password self-service reset function.

To encourage continuous self-learning, we launched an online learning platform in December 2024, offering comprehensive materials, such as post-course tests and curriculum assessments. By creating an account on the E&M Connect app, staff can access to these learning resources and technical information on the platform to support their daily work.

企業管理
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另一項新舉措，是我們於2025年3月在「E&M Connect」流動應用程式內推出「數碼員工天地」，方便員工發表意見並獲得回饋，讓員工能快捷、雙向地參與部門事務。這數碼空間與總部大樓地下大堂現有的實體「員工天地」相輔相成。

為了提供更多戶外空間予員工休憩，我們在防水翻新工程期間，改造總部大樓二樓和七樓的戶外區域，並於2025年1月重新開放給員工使用。二樓現配置講台和音響系統，供策略業務單位舉辦活動，並大幅擴大禁煙區範圍，方便員工在戶外進行小型會議和討論，締造舒適的共享工作空間。我們會在2025年6月至7月進一步綠化七樓的戶外空間，添置植物和花卉。

我們持續提供其他員工福利服務和活動，包括員工輔導熱線和不同講座，探討工作與生活平衡的課題，例如家庭生活教育、壓力管理和靜觀練習。我們也舉辦各式各樣的康體活動和比賽，涵蓋遠足、龍舟、足球、乒乓球、羽毛球和樂器等，供有興趣的員工參加。

部門員工也積極參與社區和慈善服務，其中一名服務社區長達25年的義工人員，更於公務員事務局2024年公務員義工嘉許計劃中獲頒卓越義工獎（銅獎）。



我們定期舉辦各種康體活動，例如體育比賽和參觀古蹟，使員工的工餘時間更充實，並增強歸屬感。

We regularly organise a variety of recreational and sports activities, such as sports competitions and heritage site visits, to enrich staff's leisure time and strengthen their sense of belonging.

Another new initiative is the Digital Staff Corner launched on the E&M Connect app in March 2025, which enables staff to share their views and receive feedback, facilitating speedy, two-way staff engagement in departmental affairs. This digital space complements the existing physical Staff Corner at the Headquarters Building's ground floor lobby.

To provide more outdoor space for staff relaxation, we revamped the second and seventh-floor outdoor areas of the Headquarters Building during the waterproofing overhaul. Both refurbished spaces reopened to staff in January 2025. The second floor is now equipped with a podium and sound system for SBU activities, along with a significantly expanded non-smoking zone. These improvements allow staff to hold small-scale meetings and discussions outdoors, creating an enjoyable co-working space. The outdoor areas on the seventh floor will be further beautified with greenery and flowers between June and July 2025.

We continued to arrange for staff wellbeing services and activities, including a staff counselling hotline, and various seminars on work-life balance topics covering family life education, stress management and mindfulness practices. A wide range of sports and recreational activities and competitions were also held, including hiking, dragon boating, football, table tennis, badminton, musical instrument and others for interested staff to join.

Our staff actively engage in community and charitable services. Notably, one of our long-serving staff volunteers with 25 years of experience in community service was honoured by the CSB with a Bronze Prize in the Excellent Volunteer Award category under the Civil Service Volunteer Commendation Scheme 2024.



本署義工隊聯同公務員事務局義工隊和黃大仙東頭小區關愛隊一起探訪邨內的長者住戶，為他們更換環保燈泡，並分享實用節能小貼士。

Our volunteer team, together with the Civil Service Bureau's Volunteer Team and Wong Tai Sin Tung Tau Sub-district Care Team, visited elderly residents in the estate to help replace their light bulbs with eco-friendly ones and to share practical energy-saving tips.

環保措施

機電署一直鼎力支持政府推行的節能和可持續發展措施。

12月舉行的機電工程署研討會2024，是年內一項重要活動。研討會以「高質量發展 領綠色未來」為主題，由國家能源局和國家鐵路局官員、清華大學學者發表主題演講。超過400位各界嘉賓出席，展示有關新能源、智能機電、綠色交通、高效建築等的創新方案。我們也藉此機會，推出機電署微信官方帳號，以加強我們與內地的溝通和合作。

我們自2024年4月起推行新措施，在總部大樓推動節能，目標是在2020/21至2024/25年度的五年期間，把能源表現從2018/19年度水平提高6%。有關措施包括於午飯時間關掉辦公室的照明，以及調低辦公室範圍內空氣處理機組風扇的速度、調整空調運作時間，以及於非辦公時間關掉電腦和升降機等。我們還舉辦了各種宣傳活動和節能比賽，以支持節能工作。



我們在2024年4月開展節約能源運動，措施包括調整總部大樓照明和升降機系統的運作時間，並鼓勵員工在下班前關掉辦公室電器，以減少用電量。

In April 2024, we launched an energy-saving campaign that included measures such as adjusting the operating hours of the lighting and lift systems at our Headquarters Building, and encouraging staff to switch off office appliances before leaving work, so as to reduce electricity consumption.

GREEN INITIATIVES

The EMSD is a staunch supporter of the Government's initiatives in energy saving and sustainability.

A major event during the year was the EMSD Symposium 2024 held in December. Officials from the National Energy Administration and the National Railway Administration, along with academics from the Tsinghua University, delivered keynote speeches on the theme “Empowering High-quality Development for a Green Future”. More than 400 guests from various sectors attended the symposium, showcasing innovative solutions in new energy, smart E&M, green transport and high productivity construction. We also took the occasion to launch the EMSD WeChat official account, with the aim to enhance our communication and collaboration with the Mainland.

We have taken new measures since April 2024 to promote energy saving in our Headquarters Building, with the target to improve energy performance by 6% from the 2018/19 level, over the five-year period from 2020/21 to 2024/25. These measures include switching off office lighting and lowering the fan speed of air-handling units in office area during lunch hours, adjusting the operation schedule of air-conditioning systems and turning off computers and lifts during non-office hours. Publicity campaigns and an Energy Saving Competition were organised to support these green efforts.



持份者與社區參與

我們主動聯繫業界和社區，以實施第三個計劃中「加強多方創新協作」的策略。

年內，營運基金舉辦了多項業界活動，值得一提的是，我們於11月在香港科學園(科學園)舉辦機電裝備合成法研討會2024，約800名來自政府部門、顧問公司、承辦商、學術和專業機構的代表出席。研討會有項目簡報介紹和展覽攤位，展示「機電裝備合成法」在新舊建築物、基礎設施和區域供冷系統應用優勢。此外，營運基金於2024年10月舉辦為期三天的大灣區考察團，團員參觀了五家企業，深入了解「機電裝備合成法」和「組裝合成」建築法。

一年一度的機電創科日於2024年7月假科學園舉行。活動為期兩天，以「機電人工智能應用方案」為主題，匯聚19個創科伙伴，展示並交流應用於機電業的人工智能方案，吸引約350名來自公私營機構的人士到場參與，網上播放平台亦錄得約15 000人次觀看。

STAKEHOLDER AND COMMUNITY ENGAGEMENT

We proactively liaised with the trade and community to step up our efforts in “strengthening innovative collaboration between stakeholders”, one of the strategies under our third Plan.

Multiple trade events were held during the year. Of note was the MiMEP Symposium 2024 in November at the Hong Kong Science Park (HKSP) with about 800 attendees, including representatives from government departments, consultants, contractors, academic and professional institutions. The symposium featured thematic presentations and exhibition booths on the merits of applying Multi-trade integrated Mechanical, Electrical and Plumbing (MiMEP) technology in new and existing buildings, infrastructure and district cooling systems. In addition, a three-day study tour to the GBA was organised in October 2024, in which the participants visited five enterprises to gain insights into MiMEP and Modular Integrated Construction (MiC) technologies.

Our annual E&M I&T Day was held in July 2024 at the HKSP. Themed “AI Application in E&M Industry”, the two-day event brought together 19 I&T partners to showcase and exchange AI solutions applicable to the E&M sector, attracting around 350 participants on site from the public and private sectors, and approximately 15 000 views on the online streaming platform.



由建築署和機電署合辦的機電裝備合成法研討會2024，提供平台讓業界伙伴分享應用「機電裝備合成法」的經驗和心得。

Co-organised by the Architectural Services Department and the EMSD, the MiMEP Symposium 2024 provided a platform for industry partners to share their experience and insights on the adoption of MiMEP.

機電創科日2024以「機電人工智能應用方案」為主題，匯聚19個創科伙伴，展示他們的創科成果和多個應用於機電業的人工智能方案。

Themed “AI Application in the E&M Industry”, the E&M I&T Day 2024 brought together 19 I&T partners to showcase their I&T achievements and various AI solutions applicable to the E&M sector.



機電署與香港機電業推廣工作小組於2025年3月在青年學院(葵涌)合辦機電業博覽2025，提供有關機電業發展、就業、進修和培訓的資訊，鼓勵年青人才投身機電業。博覽會約有1 100名參加者出席，包括業界人士、職訓局學員、中學生和市民。

一如往年，我們繼續透過不同活動向員工和業界推廣品質與安全的重要，例如於10月聯同職業安全健康局和香港科技園公司合辦安全研討會2024，以及於11月舉辦年度的品質及安全日。

為配合政府推廣安全智慧工地系統，我們於2024年7月推出機電工程署安全智慧工地系統，以實現「零事故」的目標。這個中央管理平台收集不同工地在遵從安全規定方面的實時資訊，識別潛在安全風險，並即時向在場安全管理人員發出警示。我們亦欣見機電署承辦商在發展局和建造業議會合辦的第30屆公德地盤嘉許計劃中取得佳績，機電署六份合約共獲得14個獎項。

We also co-organised the E&M Expo 2025 with the Hong Kong Electrical and Mechanical Trade Promotion Working Group in March 2025 at the Youth College (Kwai Chung) to provide information on the development, career prospects, as well as continuing education and training of the E&M industry, in a bid to encourage young talent to join the trade. The Expo was attended by about 1 100 participants, including trade members, VTC trainees, secondary school students and the public.

As in past years, we continued to promote the importance of quality and safety to our staff and the trade through various initiatives. For example, we jointly hosted the Safety Conference 2024 with the Occupational Safety and Health Council and the Hong Kong Science and Technology Parks Corporation in October, and held the annual Quality and Safety Day in November.

To support the Government in promoting the Smart Site Safety System (4S), we launched in July 2024 the “EMSD 4S” to help achieve the “zero incident” goal. This centralised management platform collects real-time information on safety compliance from different work sites, identifying potential safety risks and promptly alerting on-site safety management staff. We are also delighted that our contractors performed well in the 30th Considerate Contractors Site Award Scheme jointly organised by the Development Bureau and the Construction Industry Council (CIC), with six EMSD contracts winning a total of 14 awards.



部門舉辦多項活動，包括安全研討會2024和2024品質及安全日，促進員工和業界伙伴交流運用創科提升工地安全的經驗。

The Department organised various activities, including the Safety Conference 2024 and the Quality and Safety Day 2024, facilitating experience sharing between our staff and industry partners on leveraging I&T to enhance site safety.



機電署和建造業議會代表於2024年10月至11月前往三個機電署合約工地，了解安全智慧工地系統的推行情況。機電署已建立部門的安全智慧工地系統，以制訂統一的安全標準，減省成本。

Between October and November 2024, representatives of the EMSD and the CIC visited three EMSD contract sites to understand the implementation of 4S there. The EMSD has developed its departmental 4S to establish uniform safety standards and reduce costs.

企業管理
CORPORATE STEWARDSHIP

為了向香港和廣州的市民推廣創科文化，我們參加創新科技署於11月在科學園舉辦的創新科技嘉年華2024，以及廣東省科學技術協會於9月在廣州舉辦的第七屆廣東科普嘉年華。

我們在社區外展工作方面取得突破，於2024年10月在大圍圍方舉辦首個大型商場展覽活動「機智啤啤學院」。一連六日的活動吸引超過10 000名市民參與，並以輕鬆有趣的方式向年青人推廣機電安全、能源效益和創科。乘勢而上，我們將於2025年7月在香港書展設置展覽攤位，進一步與公眾聯繫，激發年青一代投身機電業的興趣。



為推動香港和大灣區的創科文化，我們積極參與兩地業界伙伴舉辦的活動，包括第七屆廣東科普嘉年華(左)和第三屆大灣區工程師論壇(右)。
To promote I&T culture in Hong Kong and the GBA, we actively participated in events organised by industry partners from both places, including the Seventh Guangdong Science Carnival (left) and the Third Greater Bay Area Engineers Forum (right).

機電署在2024年10月舉辦首個大型商場展覽活動「機智啤啤學院」，設有攤位遊戲和STEAM工作坊，藉此推廣機電安全和能源效益，並向公眾介紹機電行業。
In October 2024, the EMSD hosted the Witty Bear Academy, its first large-scale shopping mall exhibition that featured game booths and STEAM workshops to promote E&M safety and energy efficiency, while introducing the E&M industry to the public.

慶祝營運基金成立30周年

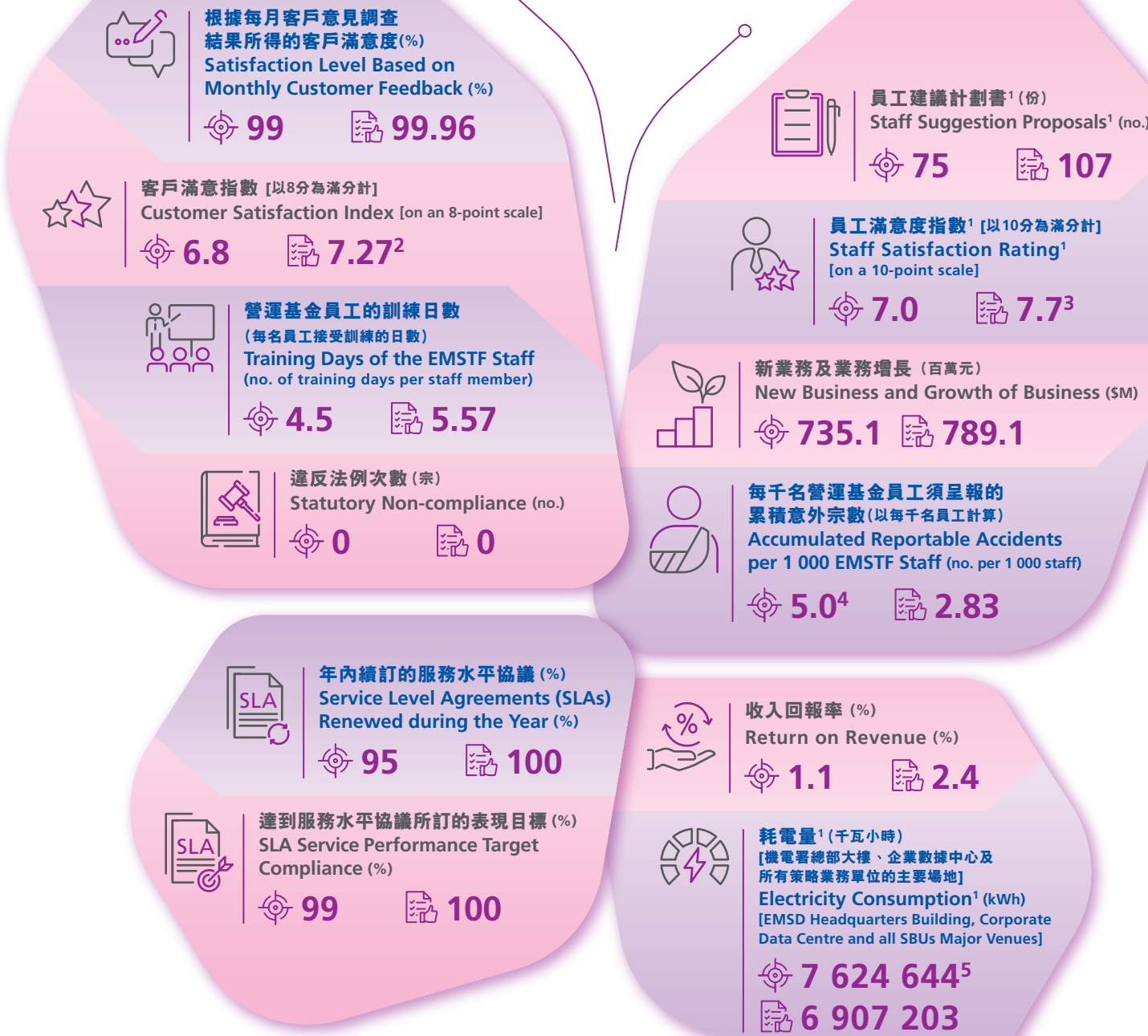
營運基金取得長足進步，目前正籌備2026年的成立30周年慶祝活動。在客戶和持份者的支持下，我們會繼續努力朝目標邁進，為香港創造重大價值。

CELEBRATING THE 30TH ANNIVERSARY OF THE EMSTF

The EMSTF has come a long way, and preparations are underway to celebrate its 30th anniversary in 2026. With the ongoing support of all our clients and stakeholders, we shall continue to strive towards our goals and deliver great value to Hong Kong.

2024/25財政年度關鍵績效指標成績及表現承諾
Key Performance Indicator Results and Performance Pledges in Financial Year 2024/25

目標 Target
成績 Result



1 此項目適用於機電署整個部門，其他項目只適用於營運基金。

2 數字為2024年的調查結果。下一次調查將於2026年進行。

3 數字為2023年的調查結果。下一次調查將於2025年進行。

4 此為警戒水平，並非目標。

5 經考慮「綠色能源目標」後於2020年10月訂立的目標。

1 This item applies to the EMSD as a whole. Other items apply to the EMSTF only.

2 Results are derived from the survey conducted in 2024. The next survey will be conducted in 2026.

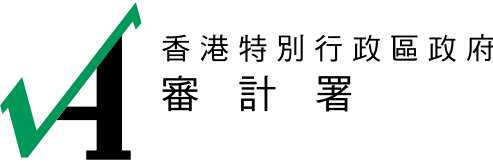
3 Results are derived from the survey conducted in 2023. The next survey will be conducted in 2025.

4 This is an alert level, not a target.

5 The target was set after taking into consideration the Green Energy Target in October 2020.

審計署署長報告

REPORT OF THE DIRECTOR OF AUDIT



香港特別行政區政府
審計署

獨立審計師報告

致立法會

意見

茲證明我已審核及審計列載於第 69 至 95 頁機電工程營運基金的財務報表，該等財務報表包括於 2025 年 3 月 31 日的財務狀況表與截至該日止年度的全面收益表、權益變動表和現金流量表，以及財務報表的附註，包括重大會計政策資料。

我認為，該等財務報表已按照香港會計師公會頒布的《香港財務報告會計準則》真實而中肯地反映機電工程營運基金於 2025 年 3 月 31 日的狀況及截至該日止年度的運作成果及現金流量，並已按照《營運基金條例》(第 430 章) 第 7(4) 條所規定的方式妥為擬備。

意見的基礎

我已按照《營運基金條例》第 7(5) 條及審計署的審計準則進行審計。我根據該等準則而須承擔的責任，詳載於本報告「審計師就財務報表審計而須承擔的責任」部分。根據該等準則，我獨立於機電工程營運基金，並已按該等準則履行其他道德責任。我相信，我所獲得的審計憑證是充足和適當地為我的審計意見提供基礎。

Audit Commission The Government of the Hong Kong Special Administrative Region

INDEPENDENT AUDITOR'S REPORT

To the Legislative Council

Opinion

I certify that I have examined and audited the financial statements of the Electrical and Mechanical Services Trading Fund set out on pages 69 to 95, which comprise the statement of financial position as at 31 March 2025, and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including material accounting policy information.

In my opinion, the financial statements give a true and fair view of the state of affairs of the Electrical and Mechanical Services Trading Fund as at 31 March 2025, and of its results of operations and cash flows for the year then ended in accordance with HKFRS Accounting Standards as issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in accordance with the manner provided in section 7(4) of the Trading Funds Ordinance (Cap. 430).

Basis for opinion

I conducted my audit in accordance with section 7(5) of the Trading Funds Ordinance and the Audit Commission auditing standards. My responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of my report. I am independent of the Electrical and Mechanical Services Trading Fund in accordance with those standards, and I have fulfilled my other ethical responsibilities in accordance with those standards. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

審計署署長報告

Report of the Director of Audit

機電工程營運基金總經理就財務報表須承擔的責任

機電工程營運基金總經理須負責按照香港會計師公會頒布的《香港財務報告會計準則》及《營運基金條例》第 7(4) 條擬備真實而中肯的財務報表，及落實其認為必要的內部控制，使財務報表不存有因欺詐或錯誤而導致的重大錯誤陳述。

在擬備財務報表時，機電工程營運基金總經理須負責評估機電工程營運基金持續經營的能力，以及在適用情況下披露與持續經營有關的事項，並以持續經營作為會計基礎。

審計師就財務報表審計而須承擔的責任

我的目標是就整體財務報表是否不存有任何因欺詐或錯誤而導致的重大錯誤陳述取得合理保證，並發出包括我意見的審計師報告。合理保證是高水平保證，但不能確保按審計署審計準則進行的審計定能發現所存有的任何重大錯誤陳述。錯誤陳述可以由欺詐或錯誤引起，如果合理預期它們個別或滙總起來可能影響財務報表使用者所作出的經濟決定，則會被視作重大錯誤陳述。

在根據審計署審計準則進行審計的過程中，我會運用專業判斷並秉持專業懷疑態度。我亦會：

- 識別和評估因欺詐或錯誤而導致財務報表存有重大錯誤陳述的風險；設計及執行審計程序以應對這些風險；以及取得充足和適當的審計憑證，作為我意見的基礎。由於欺詐可能涉及串謀、偽造、蓄意遺漏、虛假陳述，或凌駕內部控制的情況，因此未能發現因欺詐而導致重大錯誤陳述的風險，較未能發現因錯誤而導致者為高；
- 了解與審計相關的內部控制，以設計適當的審計程序。然而，此舉並非旨在對機電工程營運基金內部控制的有效性發表意見；

Responsibilities of the General Manager, Electrical and Mechanical Services Trading Fund for the financial statements

The General Manager, Electrical and Mechanical Services Trading Fund is responsible for the preparation of financial statements that give a true and fair view in accordance with HKFRS Accounting Standards as issued by the HKICPA and section 7(4) of the Trading Funds Ordinance, and for such internal control as the General Manager, Electrical and Mechanical Services Trading Fund determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the General Manager, Electrical and Mechanical Services Trading Fund is responsible for assessing the Electrical and Mechanical Services Trading Fund's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting.

Auditor's responsibilities for the audit of the financial statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Audit Commission auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the Audit Commission auditing standards, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Electrical and Mechanical Services Trading Fund's internal control;

審計署署長報告
Report of the Director of Audit

審計師就財務報表審計而須承擔的責任 (續)

- 評價機電工程營運基金總經理所採用的會計政策是否恰當，以及其作出的會計估計和相關資料披露是否合理；
- 判定機電工程營運基金總經理以持續經營作為會計基礎的做法是否恰當，並根據所得的審計憑證，判定是否存在與事件或情況有關，而且可能對機電工程營運基金持續經營的能力構成重大疑慮的重大不確定性。如果我認為存在重大不確定性，則有必要在審計師報告中請使用者留意財務報表中的相關資料披露。假若所披露的相關資料不足，我便須發出非無保留意見的審計師報告。我的結論是基於截至審計師報告日止所取得的審計憑證。然而，未來事件或情況可能導致機電工程營運基金不能繼續持續經營；及
- 評價財務報表的整體列報方式、結構和內容，包括披露資料，以及財務報表是否中肯反映交易和事項。

我與機電工程營運基金總經理溝通計劃的審計範圍和時間以及重大審計發現等事項，包括我在審計期間識別出內部控制的任何重大缺陷。

審計署署長
(審計署助理署長莫澤文
代行)

審計署
香港
金鐘道66號
金鐘道政府合署
高座6樓

2025年9月25日

Auditor's responsibilities for the audit of the financial statements (continued)

- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the General Manager, Electrical and Mechanical Services Trading Fund;
- conclude on the appropriateness of the General Manager, Electrical and Mechanical Services Trading Fund's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Electrical and Mechanical Services Trading Fund's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Electrical and Mechanical Services Trading Fund to cease to continue as a going concern; and
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the General Manager, Electrical and Mechanical Services Trading Fund regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Terry Mok
Assistant Director of Audit
for Director of Audit

Audit Commission
6th Floor, High Block
Queensway Government Offices
66 Queensway
Hong Kong

25 September 2025

全面收益表
STATEMENT OF COMPREHENSIVE INCOME

截至2025年3月31日止年度
(以港幣千元位列示)

for the year ended 31 March 2025
(Expressed in thousands of Hong Kong dollars)

	附註 Note	2025	2024
來自客戶合約之收入	(4)	9,833,278	9,280,677
運作成本	(5)	(9,595,412)	(9,140,719)
運作盈利		237,866	139,958
其他收入	(6)	311,246	323,827
年度盈利		549,112	463,785
其他全面收益		—	—
年度總全面收益		549,112	463,785
固定資產回報率	(7)	14.2%	8.8%

第74至95頁的附註為本財務報表的一部分。

The notes on pages 74 to 95 form part of these financial statements.

財務狀況表

STATEMENT OF FINANCIAL POSITION

於 2025 年 3 月 31 日
(以港幣千元位列示)

as at 31 March 2025
(Expressed in thousands of Hong Kong dollars)

		附註 Note	2025	2024
非流動資產				
物業、設備及器材	Property, plant and equipment	(8)	1,478,392	1,442,993
使用權資產	Right-of-use assets	(9(a))	64,661	62,494
無形資產	Intangible assets	(10)	231,638	196,493
外匯基金存款	Placement with the Exchange Fund	(11)	4,030,000	4,030,000
			5,804,691	5,731,980
流動資產				
存貨	Inventories		61,467	61,883
外匯基金存款	Placement with the Exchange Fund	(11)	2,261,765	2,037,276
應收帳款及其他應收款項	Trade and other receivables	(12), (13(a))	96,609	85,716
應收關連人士帳款	Amounts due from related parties	(13(a)), (21)	509,666	391,476
銀行存款	Bank deposits		2,370,000	2,490,000
現金及銀行結餘	Cash and bank balances		13,860	18,875
			5,313,367	5,085,226
流動負債				
客戶按金	Customers' deposits	(14)	(2,134,304)	(2,226,854)
應付帳款及其他應付款項	Trade and other payables		(1,102,441)	(1,051,008)
應付關連人士帳款	Amounts due to related parties	(21)	(249,358)	(243,245)
租賃負債	Lease liabilities	(9(b))	(13,523)	(14,783)
僱員福利撥備	Provision for employee benefits	(15)	(79,577)	(72,845)
遞延收入	Deferred revenue	(13(b))	(865,605)	(781,183)
			(4,444,808)	(4,389,918)
流動資產淨額	Net current assets		868,559	695,308
總資產減去流動負債	Total assets less current liabilities		6,673,250	6,427,288
非流動負債				
租賃負債	Lease liabilities	(9(b))	(52,785)	(48,839)
僱員福利撥備	Provision for employee benefits	(15)	(458,555)	(471,606)
			(511,340)	(520,445)
資產淨額	NET ASSETS		6,161,910	5,906,843

財務狀況表

Statement of Financial Position

於 2025 年 3 月 31 日
(以港幣千元位列示)

as at 31 March 2025
(Expressed in thousands of Hong Kong dollars)

		附註 Note	2025	2024
資本及儲備				
營運基金資本	Trading fund capital	(16)	706,600	706,600
保留盈利	Retained earnings	(17)	5,455,310	5,200,243
			6,161,910	5,906,843

第 74 至 95 頁的附註為本財務報表的一部分。

The notes on pages 74 to 95 form part of these financial statements.

潘國英
總經理
機電工程營運基金

POON KWOK YING
General Manager
Electrical and Mechanical Services Trading Fund

2025 年 9 月 25 日

25 September 2025

權益變動表

STATEMENT OF CHANGES IN EQUITY

截至2025年3月31日止年度 for the year ended 31 March 2025
(以港幣千元位列示) (Expressed in thousands of Hong Kong dollars)

	附註 Note	2025	2024
在年初的結餘	Balance at beginning of year	5,906,843	6,709,200
年度總全面收益	Total comprehensive income for the year	549,112	463,785
政府法定回報	Statutory return to the Government (17)	(294,045)	(1,266,142)
在年終的結餘	Balance at end of year	6,161,910	5,906,843

第 74 至 95 頁的附註為本財務報表的一部分。 The notes on pages 74 to 95 form part of these financial statements.

現金流量表

STATEMENT OF CASH FLOWS

截至2025年3月31日止年度 for the year ended 31 March 2025
(以港幣千元位列示) (Expressed in thousands of Hong Kong dollars)

	附註 Note	2025	2024
營運活動的現金流量	Cash flows from operating activities		
運作盈利	Profit from operations	237,866	139,958
調整：	Adjustments for:		
折舊及攤銷	Depreciation and amortisation	208,773	180,990
租賃負債的利息支出	Interest expense on lease liabilities	1,960	1,452
出售物業、設備及器材的虧損 / (收益)	Loss / (Gain) on disposals of property, plant and equipment	1,216	(458)
重新計量租賃負債的收益	Gain on remeasurement of lease liabilities	—	(100)
存貨的減少 / (增加)	Decrease / (Increase) in inventories	416	(440)
應收帳款及其他應收款項的增加	Increase in trade and other receivables	(2,076)	(9,229)
應收關連人士帳款的增加	Increase in amounts due from related parties	(118,190)	(6,187)
客戶按金的 (減少) / 增加	(Decrease) / Increase in customers' deposits	(92,550)	78,772
應付帳款及其他應付款項的增加	Increase in trade and other payables	51,433	44,867
應付關連人士帳款的增加	Increase in amounts due to related parties	6,113	30,801
僱員福利撥備的減少	Decrease in provision for employee benefits	(6,319)	(2,189)
遞延收入的增加 / (減少)	Increase / (Decrease) in deferred revenue	84,422	(241,445)
來自營運活動的現金淨額	Net cash from operating activities	373,064	216,792
投資活動的現金流量	Cash flows from investing activities		
原有限為3個月以上的銀行存款的減少	Decrease in bank deposits with original maturities over three months	—	240,000
購買物業、設備及器材和無形資產	Purchase of property, plant and equipment, and intangible assets	(265,159)	(252,319)
出售物業、設備及器材所得	Proceeds from disposals of property, plant and equipment	342	458
外匯基金存款的 (增加) / 減少	(Increase) / Decrease in placement with the Exchange Fund	(224,489)	739,202
已收利息	Interest received	302,429	330,631
(用於) / 來自投資活動的現金淨額	Net cash (used in) / from investing activities	(186,877)	1,057,972
融資活動的現金流量	Cash flows from financing activities		
已付政府法定回報	Statutory return paid to the Government	(294,045)	(1,266,142)
支付租賃負債	Payments of lease liabilities (9(b))	(17,157)	(18,326)
用於融資活動的現金淨額	Net cash used in financing activities	(311,202)	(1,284,468)
現金及等同現金的減少淨額	Net decrease in cash and cash equivalents	(125,015)	(9,704)
在年初的現金及等同現金	Cash and cash equivalents at beginning of year	2,508,875	2,518,579
在年終的現金及等同現金	Cash and cash equivalents at end of year (18)	2,383,860	2,508,875

第 74 至 95 頁的附註為本財務報表的一部分。 The notes on pages 74 to 95 form part of these financial statements.

財務報表附註

NOTES TO THE FINANCIAL STATEMENTS

(除另有註明外，所有金額均以港幣千元位列示) (Amounts expressed in thousands of Hong Kong dollars, unless otherwise stated)

1 總論

前立法局在1996年6月26日根據《營運基金條例》(第430章)第3、4及6條通過決議，在1996年8月1日成立機電工程營運基金(「基金」)，為客戶提供全面的機電及電子工程服務、車輛工程服務，以及工程及顧問服務。

政府各決策局、各部門及各自主機構均可自由選擇採用本基金或其他服務機構的服務，以切合他們部分或全部的機電服務需要。

2 重大會計政策

2.1 符合準則聲明

本財務報表是按照《香港財務報告會計準則》(此詞是統稱，當中包括香港會計師公會頒布的所有適用的個別香港財務報告準則、香港會計準則及詮釋)及香港公認的會計原則編製。基金採納的重大會計政策列載如下。

香港會計師公會頒布了若干新增或經修訂的《香港財務報告會計準則》並於基金的本會計期首次生效或可供提前採納。基金因首度採納其中適用的準則而引致本會計期及前會計期的會計政策改變(如有)已反映在本財務報表，有關資料載於附註3。

2.2 編製財務報表的基準

本財務報表的編製基準均以原值成本法計量。

編製符合《香港財務報告會計準則》的財務報表需要管理層作出判斷、估計及假設。該等判斷、估計及假設會影響會計政策的實施，以及資產、負債、收入與支出的呈報款額。該等估計及相關的假設，均按以往經驗及其他在有關情況下被認為合適的因素而制訂。倘若沒有其他現成數據可供參考，則會採用該等估計及假設作為判斷有關資產及負債的帳面值的基準。估計結果或會與實際價值有所不同。

GENERAL

The Electrical and Mechanical Services Trading Fund (the Fund) was established on 1 August 1996 under the Legislative Council Resolution passed on 26 June 1996 pursuant to sections 3, 4 and 6 of the Trading Funds Ordinance (Cap. 430) to provide comprehensive electrical, mechanical and electronic services, vehicle services, and project and consultancy services to clients.

Government bureaux, departments and autonomous bodies have the freedom to use the services of the Fund or to choose alternative service providers to meet part or all of their electrical and mechanical service needs.

MATERIAL ACCOUNTING POLICIES

Statement of compliance

These financial statements have been prepared in accordance with HKFRS Accounting Standards, which is a collective term that includes all applicable individual Hong Kong Financial Reporting Standards (HKFRSs), Hong Kong Accounting Standards and Interpretations as issued by the Hong Kong Institute of Certified Public Accountants (HKICPA), and accounting principles generally accepted in Hong Kong. Material accounting policies adopted by the Fund are set out below.

The HKICPA has issued certain new or amended HKFRS Accounting Standards that are first effective or available for early adoption for the current accounting period of the Fund. Note 3 provides information on the changes, if any, in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Fund for the current and prior accounting periods reflected in these financial statements.

Basis of preparation of the financial statements

The measurement basis used in the preparation of the financial statements is historical cost.

The preparation of financial statements in conformity with HKFRS Accounting Standards requires management to make judgements, estimates and assumptions that affect the application of policies and the reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

財務報表附註

Notes to the Financial Statements

2 重大會計政策 (續)

2.2 編製財務報表的基準 (續)

該等估計及其所依據的假設會作持續檢討。如修訂會計估計只影響修訂期，有關修訂會在該修訂期內確認；如修訂影響本會計期及未來的會計期，則會在修訂期及未來的會計期內確認。

基金在實施會計政策方面並不涉及任何關鍵的會計判斷。無論對未來作出的假設，或在報告日估計過程中所存在的不明朗因素，皆不足以構成重大風險，導致資產和負債的帳面金額在來年大幅修訂。

2.3 金融資產及金融負債

2.3.1 初始確認及計量

基金的金融資產包括外匯基金存款、應收帳款及其他應收款項、應收關連人士帳款、銀行存款，以及現金及銀行結餘。

基金的金融負債包括客戶按金、應付帳款及其他應付款項、應付關連人士帳款，以及租賃負債。

基金在成為有關金融工具的合約其中一方之日確認有關金融資產及金融負債。於初始確認時，金融資產及金融負債按公平值計量，再加上或減去因收購該等金融資產或發行該等金融負債而直接引致的交易成本。

MATERIAL ACCOUNTING POLICIES (continued)

Basis of preparation of the financial statements (continued)

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

There are no critical accounting judgements involved in the application of the Fund's accounting policies. There are also no key assumptions concerning the future, or other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities in the next year.

Financial assets and financial liabilities

Initial recognition and measurement

The Fund's financial assets comprise placement with the Exchange Fund, trade and other receivables, amounts due from related parties, bank deposits, and cash and bank balances.

The Fund's financial liabilities comprise customers' deposits, trade and other payables, amounts due to related parties and lease liabilities.

The Fund recognises financial assets and financial liabilities on the date it becomes a party to the contractual provisions of the instrument. At initial recognition, financial assets and financial liabilities are measured at fair value plus or minus transaction costs that are directly attributable to the acquisition of the financial assets or the issue of the financial liabilities.

2 重大會計政策 (續)

2.3 金融資產及金融負債 (續)

2.3.2 分類及其後計量

基金將其所有金融資產分類為其後以實際利率法按攤銷成本值計量，因為有關金融資產以收取合約現金流為目的的業務模式而持有，且合約現金流僅為所支付的本金及利息。金融資產的虧損準備根據附註 2.3.4 所述的預期信用虧損模型計量。

實際利率法是計算金融資產或金融負債的攤銷成本值，以及攤分及確認有關期間的利息收入或支出的方法。實際利率是指可將該金融資產或金融負債在有效期間內的預計現金收支，折現成該金融資產的帳面總值或該金融負債的攤銷成本值所適用的貼現率。基金在計算實際利率時，會考慮該金融工具的所有合約條款以估計現金流量，但不會計及預期信用虧損。有關計算包括與實際利率相關的所有收取自或支付予合約各方的費用、交易成本及所有其他溢價或折讓。

基金將其所有金融負債分類為其後以實際利率法按攤銷成本值計量，惟租賃負債按附註 2.5 所述計量。

基金僅在管理某金融資產的業務模式出現變動時，才將有關資產重新分類。金融負債不作重新分類。

2.3.3 註銷確認

當從金融資產收取現金流量的合約權利屆滿時，或該金融資產連同擁有權的絕大部分風險及回報已轉讓時，該金融資產會被註銷確認。

當合約指明的債務被解除或取消，或到期時，該金融負債會被註銷確認。

MATERIAL ACCOUNTING POLICIES (continued)

Financial assets and financial liabilities (continued)

Classification and subsequent measurement

The Fund classifies all financial assets as subsequently measured at amortised cost using the effective interest method, on the basis that they are held within a business model whose objective is to hold them for collection of contractual cash flows and the contractual cash flows represent solely payments of principal and interest. The measurement of loss allowances for financial assets is based on the expected credit loss model as described in note 2.3.4.

The effective interest method is a method of calculating the amortised cost of a financial asset or a financial liability and of allocating and recognising the interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts or payments through the expected life of the financial asset or financial liability to the gross carrying amount of the financial asset or to the amortised cost of the financial liability. When calculating the effective interest rate, the Fund estimates cash flows by considering all contractual terms of the financial instrument but does not consider the expected credit losses. The calculation includes all fees received or paid between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts.

The Fund classifies all financial liabilities as subsequently measured at amortised cost using the effective interest method, except for lease liabilities as stated in note 2.5.

The Fund reclassifies a financial asset when and only when it changes its business model for managing the asset. A financial liability is not reclassified.

Derecognition

A financial asset is derecognised when the contractual rights to receive the cash flows from the financial asset expire, or where the financial asset together with substantially all the risks and rewards of ownership have been transferred.

A financial liability is derecognised when the obligation specified in the contract is discharged or cancelled, or expires.

2 重大會計政策 (續)

2.3 金融資產及金融負債 (續)

2.3.4 金融工具減值

基金就按攤銷成本值計量的金融工具（應收帳款除外）採用由 3 個階段組成的方法計量預期信用虧損及確認相應的虧損準備及減值虧損或回撥，預期信用虧損的計量基礎取決於自初始確認以來的信用風險變化：

第 1 階段：12 個月預期信用虧損

若自初始確認以來，金融工具的信用風險並無大幅增加，全期預期信用虧損中反映在報告日後 12 個月內可能發生的違約事件引致的預期信用虧損的部分予以確認。

第 2 階段：全期預期信用虧損 — 非信用減值

若自初始確認以來，金融工具的信用風險大幅增加，但並非信用減值，全期預期信用虧損（反映在金融工具的預期有效期內所有可能出現的違約事件引致的預期信用虧損）予以確認。

第 3 階段：全期預期信用虧損 — 信用減值

若金融工具已視作信用減值，會確認全期預期信用虧損，利息收入則應用實際利率計入攤銷成本值而非帳面值總額計算。

應收帳款的虧損準備一直按相等於全期預期信用虧損的金額計量。

MATERIAL ACCOUNTING POLICIES (continued)

Financial assets and financial liabilities (continued)

Impairment of financial instruments

The Fund applies a three-stage approach to measure expected credit losses on financial instruments (other than trade receivables) measured at amortised cost and to recognise the corresponding loss allowances and impairment losses or reversals, with the change in credit risk since initial recognition determining the measurement bases for expected credit losses:

Stage 1: 12-month expected credit losses

For financial instruments for which there has not been a significant increase in credit risk since initial recognition, the portion of the lifetime expected credit losses that represent the expected credit losses that result from default events that are possible within the 12 months after the reporting date are recognised.

Stage 2: Lifetime expected credit losses – not credit impaired

For financial instruments for which there has been a significant increase in credit risk since initial recognition but that are not credit impaired, lifetime expected credit losses representing the expected credit losses that result from all possible default events over the expected life of the financial instruments are recognised.

Stage 3: Lifetime expected credit losses – credit impaired

For financial instruments that have become credit impaired, lifetime expected credit losses are recognised and interest income is calculated by applying the effective interest rate to the amortised cost rather than the gross carrying amount.

Loss allowances for trade receivables are always measured at an amount equal to lifetime expected credit losses.

2 重大會計政策 (續)

2.3 金融資產及金融負債 (續)

2.3.4 金融工具減值 (續)

如何釐定信用風險大幅增加

在每個報告日，基金藉比較金融工具於報告日及於初始確認日期在餘下的預期有效期內出現違約的風險，以評估金融工具的信用風險有否大幅增加。有關評估會考慮數量及質量歷史資料，以及具前瞻性的資料。若發生一項或多於一項對某金融資產的估計未來現金流量有不利影響的事件，該金融資產會被評定為信用減值。

基金在個別或綜合基準上評估自初始確認以來信用風險有否大幅增加。就綜合評估而言，金融工具按共同信用風險特質的基準歸類，並考慮投資類別、信用風險評級及其他相關因素。

外部信用評級為投資級別的銀行存款被視為屬低信用風險。其他金融工具若其違約風險低，且交易對手或借款人具備雄厚實力在短期內履行其合約現金流量責任，會被視為屬低信用風險。此等金融工具的信用風險會被評定為自初始確認以來並無大幅增加。

若金融資產無法收回，該金融資產會與相關虧損準備撇銷。該等資產在完成所有必要程序及釐定虧損金額後撇銷。其後收回先前被撇銷的金額會在全面收益表內確認。

MATERIAL ACCOUNTING POLICIES (continued)

Financial assets and financial liabilities (continued)

Impairment of financial instruments (continued)

Determining significant increases in credit risk

At each reporting date, the Fund assesses whether there has been a significant increase in credit risk for financial instruments since initial recognition by comparing the risk of default occurring over the remaining expected life as at the reporting date with that as at the date of initial recognition. The assessment considers quantitative and qualitative historical information as well as forward-looking information. A financial asset is assessed to be credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred.

The Fund assesses whether there has been a significant increase in credit risk since initial recognition on an individual or collective basis. For collective assessment, financial instruments are grouped on the basis of shared credit risk characteristics, taking into account investment type, credit risk ratings and other relevant factors.

Placements with banks with an external credit rating of investment grade are considered to have a low credit risk. Other financial instruments are considered to have a low credit risk if they have a low risk of default and the counterparty or borrower has a strong capacity to meet its contractual cash flow obligations in the near term. The credit risk on these financial instruments is assessed as not having increased significantly since initial recognition.

When a financial asset is uncollectible, it is written off against the related loss allowance. Such assets are written off after all the necessary procedures have been completed and the amount of the loss has been determined. Subsequent recoveries of amounts previously written off are recognised in the statement of comprehensive income.

2 重大會計政策 (續)

2.3 金融資產及金融負債 (續)

2.3.4 金融工具減值 (續)

計量預期信用虧損

金融工具的預期信用虧損是對該金融工具在預期有效期內的公平及經概率加權估計的信用虧損 (即所有短缺現金的現值)。短缺現金為按照合約應付予基金的現金流量與基金預期會收到的現金流量兩者間的差距。若金融資產在報告日視作信用減值，基金根據該資產的帳面值總額與以折現方式按該資產的原訂實際利率計算的估計未來現金流量的現值兩者間的差距計量預期信用虧損。

2.4 物業、設備及器材

於1996年8月1日撥歸基金的物業、設備及器材，最初的成本值是按前立法局所通過成立基金的決議中所列的估值入帳。自1996年8月1日起購置的物業、設備及器材均按實際成本入帳。

以下物業、設備及器材項目 (在建工程除外) 以成本值扣除累計折舊及任何減值虧損列帳 (附註2.7)：

- 建築物；以及
- 設備及器材，包括電腦器材、車輛、傢具及固定裝置，以及其他器材。

在建工程以成本值扣除任何減值虧損列帳，且不計提折舊。在建工程於完成並可供使用時開始計提折舊。

折舊是按照物業、設備及器材的估計可使用年期，以直線法攤銷扣除估計剩餘價值後的項目成本值。有關的估計可使用年期如下：

- | | |
|-----------|----------|
| — 建築物 | 35 年 |
| — 電腦器材 | 5 - 10 年 |
| — 車輛 | 4 - 9 年 |
| — 傢具及固定裝置 | 7 - 15 年 |
| — 其他器材 | 7 - 20 年 |

MATERIAL ACCOUNTING POLICIES (continued)

Financial assets and financial liabilities (continued)

Impairment of financial instruments (continued)

Measurement of expected credit losses

Expected credit losses of a financial instrument are an unbiased and probability-weighted estimate of credit losses (i.e. the present value of all cash shortfalls) over the expected life of the financial instrument. A cash shortfall is the difference between the cash flows due to the Fund in accordance with the contract and the cash flows that the Fund expects to receive. For a financial asset that is credit impaired at the reporting date, the Fund measures the expected credit losses as the difference between the asset's gross carrying amount and the present value of estimated future cash flows discounted at the asset's original effective interest rate.

Property, plant and equipment

Property, plant and equipment appropriated to the Fund on 1 August 1996 were measured initially at deemed cost equal to the value contained in the Legislative Council Resolution for the setting up of the Fund. Property, plant and equipment acquired since 1 August 1996 are capitalised at the actual costs incurred.

The following items of property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses (note 2.7):

- buildings; and
- plant and equipment, including computer equipment, motor vehicles, furniture and fixtures, and other equipment.

Construction in progress is stated at cost less any impairment losses, and is not depreciated. It is depreciated when completed and ready for use.

Depreciation is calculated to write off the cost of items of property, plant and equipment, less their estimated residual value, on a straight-line basis over their estimated useful lives as follows:

- | | |
|--------------------------|--------------|
| — Buildings | 35 years |
| — Computer equipment | 5 - 10 years |
| — Motor vehicles | 4 - 9 years |
| — Furniture and fixtures | 7 - 15 years |
| — Other equipment | 7 - 20 years |

2 重大會計政策 (續)

2.4 物業、設備及器材 (續)

折舊方法、可使用年期及剩餘值在每個財政年度結算日評估，並在適當時作出調整。

基金的建築物所在的土地視為非折舊資產。

出售物業、設備及器材的損益以出售所得淨額與資產的帳面值之間的差額來決定，並在出售日於全面收益表內確認。

2.5 租賃

租賃會於其生效日在財務狀況表內確認為使用權資產及相應的租賃負債，惟涉及租賃期為12個月或以下的短期租賃及低價值資產租賃的相關款項會在租賃期內以直線法計入全面收益表。

使用權資產會按成本值扣除累計折舊及任何減值虧損計量(附註2.7)。該使用權資產按租賃期及資產的估計可使用年期兩者中的較短者以直線法折舊。

租賃負債按在租賃期應支付的租賃款項的現值計量，並以租賃隱含利率折現，或如該利率未能確定，則以基金的遞增借款利率折現。租賃負債其後按租賃負債計提的利息與所支付的租賃款項，及任何源於租賃負債重估或租賃修改的重新計量作調整。

2.6 無形資產

無形資產包括購入的電腦軟件牌照及已資本化的電腦軟件程式開發成本值。電腦軟件程式的開發費用須能可靠地計量，程式須在技術上可行且很可能產生未來經濟利益，而基金須有意及有足夠資源完成開發工作並使用所產生的資產，有關的開發費用才會被資本化。否則，該費用會於全面收益表內支銷。無形資產按成本值扣除累計攤銷及任何減值虧損列帳(附註2.7)。

MATERIAL ACCOUNTING POLICIES (continued)

Property, plant and equipment (continued)

Depreciation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

The land on which the Fund's buildings are situated is regarded as a non-depreciating asset.

Gains or losses arising from the disposal of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the asset, and are recognised in the statement of comprehensive income on the date of disposal.

Leases

A lease is recognised in the statement of financial position as a right-of-use asset with a corresponding lease liability at the lease commencement date, except that payments associated with short-term leases having a lease term of 12 months or less and leases of low-value assets are charged to the statement of comprehensive income on a straight-line basis over the lease term.

A right-of-use asset is measured at cost less accumulated depreciation and any impairment losses (note 2.7). The right-of-use asset is depreciated on a straight-line basis over the shorter of the lease term and the asset's estimated useful life.

The lease liability is measured at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Fund's incremental borrowing rate. The lease liability is subsequently adjusted by the effect of the interest on and the settlement of the lease liability, and the remeasurement arising from any reassessment of the lease liability or lease modification.

Intangible assets

Intangible assets include acquired computer software licences and capitalised development costs of computer software programmes. Expenditure on development of computer software programmes is capitalised only if the expenditure can be measured reliably, the programmes are technically feasible, future economic benefits are probable and the Fund intends to and has sufficient resources to complete development and to use the resulting asset. Otherwise, it is recognised in the statement of comprehensive income as incurred. Intangible assets are stated at cost less accumulated amortisation and any impairment losses (note 2.7).

2 重大會計政策 (續)

2.6 無形資產 (續)

無形資產的攤銷按估計可使用年期(5至10年)以直線法列入全面收益表。

攤銷方法、可使用年期及剩餘值在每個財政年度結算日評估，並在適當時作出調整。

2.7 非金融資產的減值

非金融資產(包括物業、設備及器材、使用權資產和無形資產)的帳面值在每個報告日評估，以確定有否出現減值跡象。若有減值跡象而資產的帳面值高於其可收回數額時，則有關減值虧損會在全面收益表內確認。資產的可收回數額為其公平值減出售成本與使用值兩者中的較高者。

2.8 存貨

存貨是提供服務所需的材料。它們是以成本值與可實現淨值之中較低者列帳，成本值是以加權平均成本法計算。可實現淨值是指在一般經營情況下估計售價扣除估計所需銷售成本的淨值。所有存貨虧損及撇帳至可實現淨值的虧損會在虧損發生時確認為當期的一項開支。

提供服務時被支用的存貨，其帳面值會於確認其相關收入的同一期間確認為一項開支。

2.9 現金及等同現金

現金及等同現金包括現金及銀行結餘，以及屬短期及流通性高的投資，該等項目在購入時距期滿日不超過3個月，並隨時可轉換為已知數額的現金，而其價值變動的風險不大。

2.10 遞延收入

在基金移轉服務予客戶前，若客戶支付代價，或基金具有無條件限制的代價收款權，基金會將其合約負債確認為遞延收入。基金在移轉服務以履行其履約責任時，會註銷確認遞延收入，並就收入加以確認。

MATERIAL ACCOUNTING POLICIES (continued)

Intangible assets (continued)

Amortisation of intangible assets is charged to the statement of comprehensive income on a straight-line basis over the assets' estimated useful lives of 5 to 10 years.

Amortisation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

Impairment of non-financial assets

The carrying amounts of non-financial assets, including property, plant and equipment, right-of-use assets and intangible assets, are reviewed at each reporting date to identify any indication of impairment. If any such indication exists, an impairment loss is recognised in the statement of comprehensive income whenever the carrying amount of an asset exceeds its recoverable amount. The recoverable amount of an asset is the higher of its fair value less costs of disposal and value in use.

Inventories

Inventories are materials to be consumed in the rendering of services. They are stated at the lower of cost and net realisable value, cost being determined using the weighted average cost method. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs necessary to make the sale. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period in which the write-down or loss occurs.

When inventories are consumed in the rendering of services, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised.

Cash and cash equivalents

Cash and cash equivalents include cash and bank balances, and other short-term highly liquid investments that are readily convertible to known amounts of cash and subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition.

Deferred revenue

If a customer pays consideration, or the Fund has an unconditional right to consideration, before the Fund transfers a service to the customer, the Fund recognises its contract liability as deferred revenue. The Fund derecognises the deferred revenue and recognises revenue when the Fund transfers the service and, therefore, satisfies its performance obligation.

2 重大會計政策 (續)

2.11 僱員福利

基金的僱員包括公務員及合約員工。薪金、約滿酬金及年假開支均在僱員提供有關服務所在年度以應計基準確認入帳。就公務員而言，僱員附帶福利開支包括香港特別行政區政府(「政府」)給予僱員的退休金及房屋福利，均在僱員提供有關服務所在年度支銷。

就按可享退休金條款受聘的公務員的長俸負債已包括於支付予政府有關附帶福利開支中。就其他員工而言，基金向《強制性公積金計劃條例》(第485章)下的供款計劃於全面收益表內支銷。

2.12 收入的確認

基金會在向客戶移轉所承諾的服務以履行其履約責任時，按基金預期就交換該項服務所應得代價的金額，確認客戶合約的收入。

利息收入按實際利率法以應計方式確認。

2.13 外幣換算

本年度的外幣交易按交易日的現貨匯率換算為港元。以非港元為單位的貨幣資產及負債按報告日的收市匯率換算為港元。外幣換算產生的匯兌收益及虧損會在全面收益表中確認。

2.14 撥備及或有負債

如基金須就已發生的事件承擔現有法律或推定責任，而又可能需要付出經濟代價以履行該項責任，基金會在能夠可靠地估計涉及的金額時，為該項在時間上或金額上尚未確定的責任撥備。如金錢的時間價值重大，則會按預計履行該項責任所需開支的現值作出撥備。

MATERIAL ACCOUNTING POLICIES (continued)

Employee benefits

The employees of the Fund comprise civil servants and contract staff. Salaries, staff gratuities and annual leave entitlements are accrued and recognised as expenditure in the year in which the associated services are rendered by the staff. For civil servants, staff on-costs, including pensions and housing benefits provided to the staff by the Government of the Hong Kong Special Administrative Region (the Government), are charged as expenditure in the year in which the associated services are rendered.

For civil servants employed on pensionable terms, their pension liabilities are discharged by reimbursement of the staff on-costs charged by the Government. For other staff, contributions to the schemes under the Mandatory Provident Fund Schemes Ordinance (MPFSO) (Cap.485) are charged to the statement of comprehensive income as incurred.

Revenue recognition

The Fund recognises revenue from contracts with customers when it satisfies a performance obligation by transferring a promised service to a customer, at the amount of consideration to which the Fund expects to be entitled in exchange for the service.

Interest income is recognised on an accrual basis using the effective interest method.

Foreign currency translation

Foreign currency transactions during the year are translated into Hong Kong dollars using the spot exchange rates at the transaction dates. Monetary assets and liabilities denominated in currencies other than Hong Kong dollars are translated into Hong Kong dollars using the closing exchange rate at the reporting date. Exchange gains and losses are recognised in the statement of comprehensive income.

Provisions and contingent liabilities

Provisions are recognised for liabilities of uncertain timing or amount when the Fund has a present legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

2 重大會計政策 (續)

2.14 撥備及或有負債 (續)

若承擔有關責任可能無須付出經濟代價或是無法可靠地估計涉及的金額，該責任便會以或有負債的形式披露，除非須付出經濟代價的可能性極低。至於只能由日後是否發生某宗或多宗事件才確定會否出現的或然責任，亦會以或有負債的形式披露，除非須付出經濟代價的可能性極低。

2.15 關連人士

基金是根據《營運基金條例》成立，並屬政府轄下的一個獨立會計單位。年內，基金在日常業務中曾與各關連人士進行交易。這些關連人士包括政府各決策局及部門、其他營運基金，以及受政府所管制或政府對其有重大影響力的財政自主機構。

3 會計政策改變

香港會計師公會頒布了若干新增或經修訂的《香港財務報告會計準則》並於基金的本會計期首次生效。適用於本財務報表所呈報年度的會計政策，並未因這些發展而有任何改變。

基金並沒有採納在本會計期尚未生效的任何新準則或詮釋(附註23)。

4 來自客戶合約之收入

MATERIAL ACCOUNTING POLICIES (continued)

Provisions and contingent liabilities (continued)

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events, are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

Related parties

The Fund is a separate accounting entity within the Government established under the Trading Funds Ordinance. During the year, the Fund has entered into transactions with various related parties, including government bureaux and departments, other trading funds and financially autonomous bodies controlled or significantly influenced by the Government, in the ordinary course of its business.

CHANGES IN ACCOUNTING POLICIES

The HKICPA has issued certain new or amended HKFRS Accounting Standards that are first effective for the current accounting period of the Fund. There have been no changes to the accounting policies applied in these financial statements for the years presented as a result of these developments.

The Fund has not applied any new standard or interpretation that is not yet effective for the current accounting period (note 23).

REVENUE FROM CONTRACTS WITH CUSTOMERS

		2025	2024
機電及電子工程服務	Electrical, mechanical and electronic services	8,781,659	8,314,216
工程及顧問服務	Project and consultancy services	466,739	450,969
車輛工程服務	Vehicle services	553,951	487,501
其他	Others	30,929	27,991
總額	Total	9,833,278	9,280,677

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4 來自客戶合約之收入 (續)

基金在客戶合約方面的履約責任，主要涉及向客戶提供全面的機電及電子工程服務、車輛工程服務，以及工程及顧問服務。就按服務水平協議提供的服務而言，基金是在提供服務的同時履行履約責任，並隨時間移轉按直線法確認收費。客戶一般須就每項服務預繳固定金額的服務費。至於按其他合約提供的服務，基金是在提供服務的同時履行履約責任，並按成本比例法確認服務費。

REVENUE FROM CONTRACTS WITH CUSTOMERS (continued)

The Fund's performance obligations in contracts with customers mainly involve providing comprehensive electrical, mechanical and electronic services, vehicle services, and project and consultancy services to the customers. For provision of services under service level agreements, the Fund satisfies its performance obligation as the service is rendered and recognises the fee over time on a straight-line basis. A customer is normally required to pay a fixed amount of service fee for each service in advance. For provision of services under other contracts, the Fund satisfies its performance obligation as the service is rendered and recognises a service fee based on a cost-to-cost method.

5 運作成本

OPERATING COSTS

		2025	2024
員工費用	Staff costs		
– 薪酬及其他員工費用	– Salaries and other staff costs	3,221,384	3,090,265
– 《強制性公積金計劃條例》下的計劃供款	– Contributions to the schemes under MPFSO	205,624	181,434
材料	Materials	526,372	549,456
承辦商費用	Contractors cost	4,918,267	4,634,414
租金及管理費用	Rental and management charges	46,101	44,424
一般運作及行政開支	General operating and administration expenses	467,658	458,522
折舊及攤銷	Depreciation and amortisation	208,773	180,990
審計費用	Audit fees	1,233	1,214
總額	Total	9,595,412	9,140,719

6 其他收入

OTHER INCOME

		2025	2024
銀行存款利息	Interest income from bank deposits	74,311	99,312
外匯基金存款利息	Interest income from placement with the Exchange Fund	236,935	224,515
總額	Total	311,246	323,827

7 固定資產回報率

RATE OF RETURN ON FIXED ASSETS

固定資產回報率是以總全面收益（不包括利息收入）除以固定資產平均淨值計算，並以百分比的方式表達。固定資產只包括物業、設備及器材和無形資產。預期基金可以達到由財政司司長根據《營運基金條例》釐定的每年固定資產目標回報率為6.4%（2024: 6.4%）。

The rate of return on fixed assets is calculated as total comprehensive income (excluding interest income) divided by average net fixed assets, and expressed as a percentage. Fixed assets include property, plant and equipment, and intangible assets only. The Fund is expected to meet a target rate of return on fixed assets of 6.4% (2024: 6.4%) per year as determined by the Financial Secretary under the Trading Funds Ordinance.

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8 物業、設備及器材

PROPERTY, PLANT AND EQUIPMENT

		土地及 建築物	電腦器材	車輛	傢具及 固定裝置	其他器材	總額
		Land and buildings	Computer equipment	Motor vehicles	Furniture and fixtures	Other equipment	Total
成本	Cost						
在2023年4月1日	At 1 April 2023	950,100	394,240	68,750	533,044	325,047	2,271,181
添置	Additions	–	71,520	9,373	100,023	20,025	200,941
出售/註銷	Disposals	–	–	(4,265)	–	–	(4,265)
在2024年3月31日	At 31 March 2024	950,100	465,760	73,858	633,067	345,072	2,467,857
在2024年4月1日	At 1 April 2024	950,100	465,760	73,858	633,067	345,072	2,467,857
添置	Additions	–	63,388	7,724	75,110	19,791	166,013
出售/註銷	Disposals	–	(275)	(3,642)	(7,486)	(436)	(11,839)
在2025年3月31日	At 31 March 2025	950,100	528,873	77,940	700,691	364,427	2,622,031
累計折舊	Accumulated depreciation						
在2023年4月1日	At 1 April 2023	262,588	220,602	54,603	257,049	126,826	921,668
年內費用	Charge for the year	7,778	42,117	4,192	30,466	22,908	107,461
出售/註銷回撥	Written back on disposals	–	–	(4,265)	–	–	(4,265)
在2024年3月31日	At 31 March 2024	270,366	262,719	54,530	287,515	149,734	1,024,864
在2024年4月1日	At 1 April 2024	270,366	262,719	54,530	287,515	149,734	1,024,864
年內費用	Charge for the year	7,778	50,253	5,435	40,452	25,138	129,056
出售/註銷回撥	Written back on disposals	–	(272)	(3,642)	(6,069)	(298)	(10,281)
在2025年3月31日	At 31 March 2025	278,144	312,700	56,323	321,898	174,574	1,143,639
帳面淨值	Net book value						
在2025年3月31日	At 31 March 2025	671,956	216,173	21,617	378,793	189,853	1,478,392
在2024年3月31日	At 31 March 2024	679,734	203,041	19,328	345,552	195,338	1,442,993

於2025年3月31日，於物業、設備及器材的帳面值中確認的2,320萬港元為在建工程的金額（2024：6,940萬港元）。

As at 31 March 2025, HK\$23.2 million (2024: HK\$69.4 million) recognised in the carrying amount of property, plant and equipment was the amount of construction in progress.

9 租賃

LEASES

(a) 使用權資產

Right-of-use assets

建築物
Buildings

		2025	2024
成本	Cost		
在年初	At beginning of year	122,329	107,536
添置	Additions	18,612	19,024
重新計量租賃負債	Remeasurement of lease liabilities	(729)	(4,231)
到期租賃合約	Expiry of lease contracts	(17,820)	–
在年終	At end of year	122,392	122,329
累計折舊	Accumulated depreciation		
在年初	At beginning of year	59,835	42,665
年內費用	Charge for the year	15,716	17,170
到期租賃合約	Expiry of lease contracts	(17,820)	–
在年終	At end of year	57,731	59,835
帳面淨值	Net book value		
在年終	At end of year	64,661	62,494

(b) 租賃負債

Lease liabilities

		2025	2024
流動	Current	13,523	14,783
非流動	Non-current	52,785	48,839
總額	Total	66,308	63,622

下表顯示租賃負債的變動，包括現金和非現金變動。

The table below shows changes in lease liabilities, including both cash and non-cash changes.

		2025	2024
在年初	At beginning of year	63,622	65,803
來自融資現金流量的變動：	Changes from financing cash flows:		
支付租賃負債	Payments of lease liabilities	(17,157)	(18,326)
非現金變動：	Non-cash changes:		
重新計量租賃負債	Remeasurement of lease liabilities	(729)	(4,331)
租賃負債的利息支出	Interest expense on lease liabilities	1,960	1,452
與新租賃相關的租賃負債增加	Increase in lease liabilities relating to new leases	18,612	19,024
在年終	At end of year	66,308	63,622

9 租賃 (續)

LEASES (continued)

(b) 租賃負債 (續)

Lease liabilities (continued)

租賃負債的剩餘合約期限列載如下，有關資料是根據合約未貼現的現金流量列出：

The remaining contractual maturities of lease liabilities, which are based on contractual undiscounted cash flows, are shown below:

		2025	2024
1年內	Within one year	15,667	16,270
1年後至2年內	After one year but within two years	16,482	15,063
2年後至5年內	After two years but within five years	35,541	33,459
5年後	After five years	4,322	3,355
總額	Total	72,012	68,147

(c) 於全面收益表內確認與租賃有關的支出項目

Expense items in relation to lease recognised in the statement of comprehensive income

		2025	2024
租賃負債的利息支出	Interest expense on lease liabilities	1,960	1,452

(d) 租賃之現金流出總額

Total cash outflow for leases

		2025	2024
租賃負債	Lease liabilities	17,157	18,326

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10 無形資產

INTANGIBLE ASSETS

		電腦軟件牌照及系統開發成本 Computer software licences and system development costs	
		2025	2024
成本	Cost		
在年初	At beginning of year	444,039	392,661
添置	Additions	99,146	51,378
出售/註銷	Disposals	(14)	–
在年終	At end of year	543,171	444,039
累計攤銷	Accumulated amortisation		
在年初	At beginning of year	247,546	191,187
年內費用	Charge for the year	64,001	56,359
出售/註銷回撥	Written back on disposals	(14)	–
在年終	At end of year	311,533	247,546
帳面淨值	Net book value		
在年終	At end of year	231,638	196,493

11 外匯基金存款

外匯基金存款結餘包括本金40.3億港元(2024: 40.3億港元)及為報告日已入帳但尚未提取的利息22.618億港元(2024: 20.373億港元)。存款期為期6年(由存款日起計)，期內不能提取本金。

外匯基金存款利息按每年1月釐定的固定息率計算。該息率是外匯基金投資組合過去6年的平均年度投資回報，或3年期政府債券在上一個年度的平均年度收益率，以0%為下限，兩者取其較高者。2025曆年固定息率為每年4.4%，2024曆年為每年3.7%。

PLACEMENT WITH THE EXCHANGE FUND

The balance of the placement with the Exchange Fund comprised principal sums of HK\$4,030 million (2024: HK\$4,030 million) and interest paid but not yet withdrawn at the reporting date of HK\$2,261.8 million (2024: HK\$2,037.3 million). The term of the placement is six years from the date of placement, during which the amount of principal sums cannot be withdrawn.

Interest on the placement is payable at a fixed rate determined every January. The rate is the average annual investment return of the Exchange Fund's Investment Portfolio for the past six years or the average annual yield of three-year Government Bond for the previous year subject to a minimum of zero percent, whichever is the higher. The interest rate has been fixed at 4.4% per annum for the calendar year 2025 and 3.7% per annum for the calendar year 2024.

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12 應收帳款及其他應收款項

TRADE AND OTHER RECEIVABLES

		2025	2024
應收帳款	Trade receivables	57	204
預付款項	Prepayments	25,219	22,996
銀行存款應計利息	Accrued interest from bank deposits	3,072	6,700
外匯基金存款應計利息	Accrued interest from placement with the Exchange Fund	68,261	55,816
總額	Total	96,609	85,716

13 與客戶的合約結餘

(a) 應收款項和合約資產

就提供予公眾的服務而言，在報告日的應收款項結餘即載於附註12的應收帳款。至於提供予關連人士的服務，於2025年3月31日的應收款項結餘為5.092億港元（2024：3.910億港元），該結餘已包括於財務狀況表中的應收關連人士帳款。而基金並沒有任何源於這些服務的合約資產。

CONTRACT BALANCES WITH CUSTOMERS

Receivables and contract assets

For services provided to the general public, the balance of receivables at the reporting date is presented as trade receivables in note 12. For services provided to related parties, the balance of receivables as at 31 March 2025 of HK\$509.2 million (2024: HK\$391.0 million) is included in the amounts due from related parties in the statement of financial position. The Fund does not have any contract assets arising from these services.

(b) 合約負債

基金在收取客戶預繳的費用後向客戶提供服務的責任，會於財務狀況表中以遞延收入的形式列出，分析如下：

Contract liabilities

The Fund's obligations to provide services to customers for which the Fund has received advance payments from the customers are presented as deferred revenue in the statement of financial position, as analysed below:

遞延收入	Deferred revenue	2025	2024
機電及電子工程服務	Electrical, mechanical and electronic services	569,641	529,967
工程及顧問服務	Project and consultancy services	196,745	153,849
車輛工程服務	Vehicle services	99,219	97,367
總額	Total	865,605	781,183
代表：	Representing:		
向關連人士提供之服務	Services to related parties	857,783	772,792
向公眾提供之服務	Services to the general public	7,822	8,391
總額	Total	865,605	781,183

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13 與客戶的合約結餘 (續)

CONTRACT BALANCES WITH CUSTOMERS (continued)

(b) 合約負債 (續)

Contract liabilities (continued)

年內遞延收入結餘的重大變動開列如下：

Significant changes in the balances of deferred revenue during the year are shown below:

		2025	2024
因年初遞延收入結餘中的款項於年內獲確認為收入而減少	Decrease due to recognition as revenue during the year that was included in the balances of deferred revenue at beginning of year	(648,853)	(879,199)
因年內收取預繳費用而增加	Increase due to advance payments received during the year	733,275	637,754

於2025年3月31日，分攤至未有履行（或部分未有履行）的履約責任的交易價格總額估計為40.332億港元（2024：54.171億港元），基金預期該金額於未來5年內獲確認為收入。沒有任何客戶合約的代價未納入交易價格。

The aggregate amount of the transaction price allocated to the performance obligations that are unsatisfied (or partially unsatisfied) as at 31 March 2025 is estimated at HK\$4,033.2 million (2024: HK\$5,417.1 million), which is expected to be recognised as revenue over the next five years. No consideration from contracts with customers is not included in the transaction price.

14 客戶按金

CUSTOMERS' DEPOSITS

指向客戶提供工程服務前收取的按金。有關按金用以支付應由客戶付予承辦商的採購費用。

This represents deposits received from customers in the provision of project services. The deposits are used to settle procurement costs payable by the customers to contractors.

15 僱員福利撥備

PROVISION FOR EMPLOYEE BENEFITS

此為在計至報告日就所提供的服務給予僱員年假及合約員工約滿酬金的估計負債（見附註2.11）。

This represents the estimated liability for employees' annual leave and obligations on contract-end gratuities payable to contract staff for services rendered up to the reporting date (see note 2.11).

16 營運基金資本

TRADING FUND CAPITAL

此為政府對基金的投資。

This represents the Government's investment in the Fund.

財務報表附註
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17 保留盈利

RETAINED EARNINGS

		2025	2024
在年初的結餘	Balance at beginning of year	5,200,243	6,002,600
年度總全面收益	Total comprehensive income for the year	549,112	463,785
政府法定回報	Statutory return to the Government	(294,045)	(1,266,142)
在年終的結餘	Balance at end of year	5,455,310	5,200,243

年內，政府根據《營運基金條例》指示將截至2024年3月31日止年度的目標回報（見附註7）及其他盈餘轉撥至政府一般收入，而該轉撥於2025年3月完成（2024：截至2023年3月31日止年度的目標回報及其他盈餘的轉撥於2023年6月及2024年3月完成）。

During the year, the Government directed the transfer of the target return (see note 7) for the year ended 31 March 2024 and other surplus into general revenue pursuant to the Trading Funds Ordinance, and the transfer was made in March 2025 (2024: the transfers of the target return for the year ended 31 March 2023 and other surpluses were made in June 2023 and March 2024).

18 現金及等同現金

CASH AND CASH EQUIVALENTS

		2025	2024
現金及銀行結餘	Cash and bank balances	13,860	18,875
銀行存款	Bank deposits	2,370,000	2,490,000
總額	Total	2,383,860	2,508,875

19 資本承擔

CAPITAL COMMITMENTS

於2025年3月31日，基金尚未在財務報表內撥備的資本承擔如下：

As at 31 March 2025, the Fund had capital commitments, so far as not provided for in the financial statements, as follows:

		2025	2024
已批准及簽約	Authorised and contracted for	11,523	9,714
已批准惟未簽約	Authorised but not yet contracted for	77,125	117,322
總額	Total	88,648	127,036

財務報表附註
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20 或有負債

於2025年3月31日，基金就一銀行向若干受益客戶發出的4,200萬港元（2024：3,820萬港元）履約保證書向該銀行提供相應的損害賠償保證，有關客戶為基金的關連人士。

21 關連人士的交易

除已在本財務報表內另作披露的交易外，年內與關連人士進行的其他重大交易摘述如下：

- (a) 基金向關連人士提供的服務包括機電及電子工程服務、車輛工程服務，以及工程及顧問服務。這些服務的收入總額為98.311億港元（2024：92.798億港元）；
- (b) 關連人士向基金提供的服務包括維修、辦公地方、中央行政，以及審計。這些服務的支出總額為1.327億港元（2024：1.434億港元）；以及
- (c) 向關連人士購入的固定資產包括裝置工程、電腦軟件及車輛。這些資產的成本總額為1,680萬港元（2024：1,260萬港元）。

向關連人士提供的服務，是以成本加成法定價。而由關連人士提供的服務，若有關服務亦有提供予公眾，則以公眾所須付的價格收費，否則按收回全部成本方式計算。

CONTINGENT LIABILITIES

As at 31 March 2025, the Fund had provided a bank with counter-indemnity in respect of performance bonds for HK\$42.0 million (2024: HK\$38.2 million) issued by the bank in favour of certain customers who are related parties of the Fund.

RELATED PARTY TRANSACTIONS

Apart from those separately disclosed in the financial statements, the other material related party transactions for the year are summarised as follows:

- (a) services provided to related parties included electrical, mechanical and electronic services, vehicle services, and project and consultancy services. The total revenue derived from these services amounted to HK\$9,831.1 million (2024: HK\$9,279.8 million);
- (b) services received from related parties included maintenance, accommodation, central administration and auditing. The total cost incurred on these services amounted to HK\$132.7 million (2024: HK\$143.4 million); and
- (c) acquisition of fixed assets from related parties included fitting out projects, computer software and motor vehicles. The total cost of these assets amounted to HK\$16.8 million (2024: HK\$12.6 million).

Services provided to related parties were priced on a cost-plus basis. Services received from related parties were charged at the rates payable by the general public for services which were also available to the public or on a full cost recovery basis for services which were available only to related parties.

財務報表附註
Notes to the Financial Statements

22 金融風險管理

22.1 投資政策

基金將現金盈餘投放於金融工具，包括定期存款及外匯基金存款。根據基金的政策，所有投放於金融工具的投資均應保本。

22.2 信用風險

信用風險指金融工具的一方將不能履行責任而且會引致另一方蒙受財務損失的風險。

基金的信用風險，主要取決於外匯基金存款、應收帳款及其他應收款項、應收關連人士帳款、銀行存款及銀行結餘。基金訂有風險政策，並持續監察須承擔的信用風險。

為盡量減低信用風險，所有定期存款均存放於香港的持牌銀行。基金的信用風險被視為有限。虧損準備按相等於12個月預期信用虧損的數額計量，基金評定所涉及的虧損並不重大。

銀行存款及銀行結餘的信用質素，以穆迪或其等同指定的評級，分析如下：

		2025	2024
信用評級：	Credit rating:		
Aa1 至 Aa3	Aa1 to Aa3	863,860	518,845
A1 至 A3	A1 to A3	1,135,000	1,800,000
Baa1 至 Baa3	Baa1 to Baa3	385,000	190,000
總額	Total	2,383,860	2,508,845

雖然其他金融資產須符合減值規定，但基金估計其預期信用虧損輕微，因此無須作出虧損準備。

在報告日基金的金融資產所須承擔的最高信用風險數額相當於其帳面值。

FINANCIAL RISK MANAGEMENT

Investment policy

Surplus cash is invested in financial instruments including fixed deposits and placement with the Exchange Fund. It is the Fund's policy that all investments in financial instruments should be principal-protected.

Credit risk

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss.

The Fund's credit risk is primarily attributable to placement with the Exchange Fund, trade and other receivables, amounts due from related parties, bank deposits and bank balances. The Fund has a credit policy in place and the exposure to these credit risks is monitored on an ongoing basis.

To minimise credit risks, all fixed deposits are placed with licensed banks in Hong Kong. The Fund's exposure to credit risk is considered to be limited. The loss allowances are measured at amounts equal to 12-month expected credit losses, which are assessed to be immaterial by the Fund.

The credit quality of bank deposits and bank balances, analysed by the ratings designated by Moody's or their equivalents, is shown below:

While other financial assets are subject to the impairment requirements, the Fund has estimated that their expected credit losses are minimal and considers that no loss allowance is required.

The maximum exposure to credit risk of the financial assets of the Fund at the reporting date is equal to their carrying amounts.

22 金融風險管理 (續)

22.3 流動資金風險

流動資金風險指某一實體將難以履行與金融負債相關的責任的風險。

基金採用預期現金流量分析來管理流動資金風險，即透過預測所需的現金款額及監察基金的營運資金，確保可以償付所有到期負債及應付所有已知的資金需求。

22.4 利率風險

利率風險指金融工具的公平值或未來現金流量會因市場利率變動而波動的風險。利率風險可進一步分為公平值利率風險及現金流量利率風險。

公平值利率風險指金融工具的公平值會因市場利率變動而波動的風險。由於基金的所有銀行存款均按固定利率計息，當市場利率上升，這些存款的公平值便會下跌。然而，由於這些存款均按攤銷成本值列帳，市場利率的變動不會影響其帳面值及基金的年度盈利。

現金流量利率風險指金融工具的未來現金流量會因市場利率變動而波動的風險。基金無須面對重大的現金流量利率風險，因為其持有的主要金融工具都不是浮息金融工具。

22.5 貨幣風險

貨幣風險指金融工具的公平值或未來現金流量會因匯率變動而波動的風險。

基金沒有重大的貨幣風險，因為其金融工具絕大部分是以港元為本位。

FINANCIAL RISK MANAGEMENT (continued)

Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities.

The Fund employs projected cash flow analysis to manage liquidity risk by forecasting the amount of cash required and monitoring the working capital of the Fund to ensure that all liabilities due and known funding requirements could be met.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. This can be further classified into fair value interest rate risk and cash flow interest rate risk.

Fair value interest rate risk is the risk that the fair value of a financial instrument will fluctuate because of changes in market interest rates. Since all of the Fund's bank deposits bear interest at fixed rates, their fair values will fall when market interest rates increase. However, as they are all stated at amortised cost, changes in market interest rates will not affect their carrying amounts and the Fund's profit for the year.

Cash flow interest rate risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Fund is not exposed to material cash flow interest rate risk because it has no major financial instruments bearing interest at a floating rate.

Currency risk

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

The Fund does not have significant exposure to currency risk as substantially all of its financial instruments are denominated in Hong Kong dollars.

22 金融風險管理 (續)

22.6 其他金融風險

基金因於每年1月釐定的外匯基金存款息率（附註11）的變動而須面對金融風險。於2025年3月31日，假設息率增加/減少50個基點而其他因素不變，估計年度盈利將增加/減少3,150萬港元（2024：3,030萬港元）。

22.7 公平值

所有金融工具均以與其公平值相等或相差不大的金額在財務狀況表內列帳。

23 已頒布但於截至2025年3月31日止年度尚未生效的修訂、新準則及詮釋的可能影響

直至本財務報表發出之日，香港會計師公會已頒布多項修訂、新準則及詮釋。該等修訂、新準則及詮釋在截至2025年3月31日止年度尚未生效，亦沒有在本財務報表中提前採納。新準則包括：

在以下日期或之後 開始的會計期生效	
香港財務報告準則第18號「財務報表列報和披露」	2027年1月1日

基金正評估首次採納香港財務報告準則第18號對其財務報表的可能影響。

香港財務報告準則第18號「財務報表列報和披露」

香港財務報告準則第18號取代香港會計準則第1號「財務報表列報」，就全面收益表的指定類別及小計項目的列報、資訊匯總與分解，以及有關由管理層定義的業績指標的披露引入新規定。基金正評估該準則對其財務報表的全面影響。該新準則將於2027年1月1日或之後開始的會計期生效，並會按追溯基礎應用，除非切實不可行，否則須重新列示比較數字。基金在現階段不擬在其生效日期前採納有關準則。

FINANCIAL RISK MANAGEMENT (continued)

Other financial risk

The Fund is exposed to financial risk arising from changes in the interest rate on the placement with the Exchange Fund which is determined every January (note 11). As at 31 March 2025, it is estimated that an increase/decrease of 50 basis points in the interest rate, with all other variables held constant, would have increased/decreased the profit for the year by HK\$31.5 million (2024: HK\$30.3 million).

Fair value

All financial instruments are stated in the statement of financial position at amounts equal to or not materially different from their fair values.

POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 MARCH 2025

Up to the date of issue of these financial statements, the HKICPA has issued a number of amendments, new standards and interpretations which are not yet effective for the year ended 31 March 2025 and which have not been adopted in these financial statements. The new standards include:

Effective for accounting periods beginning on or after	
HKFRS 18 “Presentation and Disclosure in Financial Statements”	1 January 2027

The Fund is in the process of assessing the possible impact on its financial statements of HKFRS 18 in the period of initial application.

HKFRS 18 “Presentation and Disclosure in Financial Statements”

HKFRS 18, which replaces HKAS 1 “Presentation of Financial Statements”, introduces new requirements for presentation of specified categories and subtotals in the statement of comprehensive income, aggregation and disaggregation of information, as well as disclosures related to management-defined performance measures. The Fund is assessing the full impact of the standard on its financial statements. The new standard is effective for accounting periods beginning on or after 1 January 2027 and will be applied retrospectively with restatement of comparatives unless impracticable. At this stage, the Fund does not intend to adopt the standard before its effective date.

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漁農自然護理署	Agriculture, Fisheries and Conservation Department
香港機場管理局	Airport Authority Hong Kong
中央援港應急醫院	Central Government-aided Emergency Hospital
民航處	Civil Aviation Department
香港海關	Customs and Excise Department
衛生署	Department of Health
渠務署	Drainage Services Department
消防處	Fire Services Department
食物環境衛生署	Food and Environmental Hygiene Department
政府產業署	Government Property Agency
香港警務處	Hong Kong Police Force
醫院管理局	Hospital Authority
房屋署	Housing Department
入境事務處	Immigration Department
康樂及文化事務署	Leisure and Cultural Services Department
東區尤德夫人那打素醫院	Pamela Youde Nethersole Eastern Hospital
威爾斯親王醫院	Prince of Wales Hospital
瑪嘉烈醫院	Princess Margaret Hospital
運輸署	Transport Department
將軍澳醫院	Tseung Kwan O Hospital



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