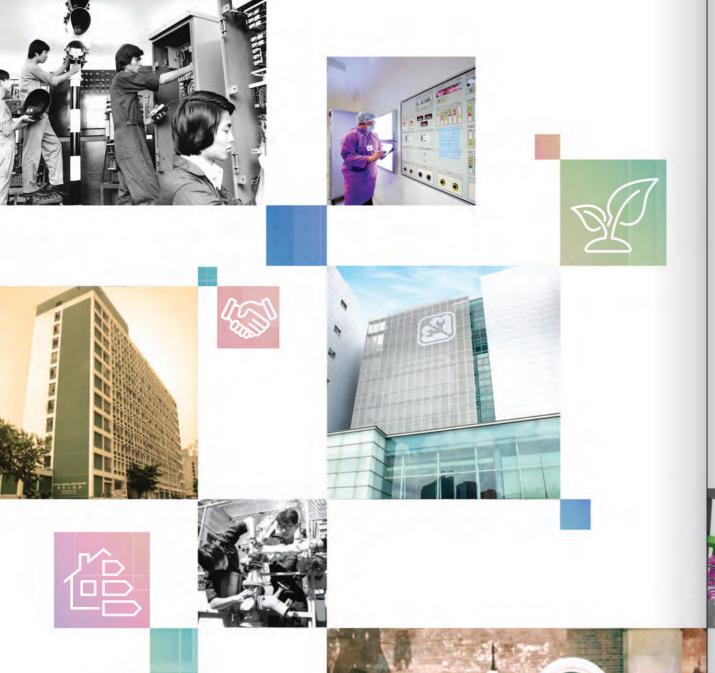


Turning M POSSIBLE











into POSSIBLE







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鳴謝 Acknowledgement

賀辭 CONGRATULATORY MESSAGES



機電工程署(機電署)七十五周年誌慶,可喜可賀。

過去四分三個世紀,機電署一直與香港並肩成長,對社會的持續進步和繁榮穩定貢獻良多。時至今日,機電署有近六千名專業及技術人員,為逾百個政府部門及公營機構提供服務,包括為政府辦公大樓、醫院、機場設施、文娛中心、保安設施、跨境設施、車隊等提供電力、機械、電子和屋宇裝備系統及設備。近年,機電署擴大職責範圍,參與緊急抗疫建設及相關工作,還協助促進碳中和,推廣能源效益,以及推動數碼化、創新及科技。該署擔當政府的創新促成者和技術顧問,表現優秀,更在今年舉行的日內瓦國際發明展榮獲二十三個獎項,再次揚威海外,足證創科實力非凡,定能協助我們建立智慧政府,發展成智慧城市。

放眼未來,機電署將陸續推展多項計劃。其中,新成立的機電青年發展委員會,會着力鼓勵更多年輕人投身機電行業,助香港開創新天。該署亦會致力與粵港澳大灣區的策略夥伴加強在創料、人才發展、安全及能源效益方面的合作,為祖國的創科發展作出更大貢獻。我深信機電署定會繼續努力不懈,推動香港邁步向前,並促進香港與整個大灣區以至國家交流協作,惠益社會。

再次祝賀機電署全體人員迎來七十五周年的新里程。相信機電署定會一如既 往,照亮這座城市的發展前路,與市民攜手並進,一同為香港開創璀璨未來。

家李

李家超

中華人民共和國香港特別行政區行政長官

I am pleased to congratulate the Electrical and Mechanical Services Department (EMSD) on its 75th anniversary.

For three-quarters of a century, the EMSD has flourished hand in hand with Hong Kong, contributing greatly to our continuing progress and prosperity. Today, the EMSD and its workforce of nearly 6 000 professional and technical grade staff provide electrical, mechanical, electronic and building services systems and equipment for government office buildings, hospitals, airport facilities, civic venues, security and border-crossing facilities and vehicle fleets, covering more than 100 government departments and public organisations. In recent years, the department has expanded its responsibilities to include urgent anti-pandemic construction and related work, as well as carbon neutrality and energy-efficiency initiatives, digitalisation, and innovation and technology (I&T) in general. Indeed, the EMSD has emerged as the Government's innovation facilitator and technical advisor. Winning 23 medals at the 2023 International Exhibition of Inventions of Geneva, the department once again proved its I&T strengths on a global level. It will certainly help power Hong Kong's advance as a smart city with a smart government.

Looking ahead, the EMSD's plans include the newly established E&M Youth Development Committee, which will encourage more young people to join the industry and help build Hong Kong's innovative future. The department will also further contribute to our nation's I&T development by strengthening co-operation with strategic partners in Guangdong-Hong Kong-Macao Greater Bay Area (GBA) in I&T, talent development, safety as well as energy efficiency. I have confidence in the EMSD's unwavering dedication to contributing to the community, playing a part in furthering the city's development and promoting cooperation with the GBA and the Motherland as a whole.

My congratulations, once again, to everyone in the EMSD on your milestone 75th anniversary. With the EMSD working to light Hong Kong's progress and our community, I am confident in our bright future.

hl:

John LEE Ka-chiu

The Chief Executive of the Hong Kong Special Administrative Region The People's Republic of China



今年是機電工程署(機電署)成立七十五周年,特致上誠摯賀忱。

香港是自由開放、與內地和世界接軌的國際大都會,機遇處處,同時「機電」 處處。事實上,各種機電設施早已融入我們的生活之中。七十五年來,機 電署不遺餘力,為社會締造優質到位的機電工程方案和服務,好好守護香 港。我對於政府擁有這支履職盡責、專業高效的機電團隊感到驕傲。

為了構建香港成為世界頂級的智慧城市,機電署一直致力配合政府的政策方向,在基礎建設、環保節能、創新科技和人才培訓等不同方面推陳出新,全方位推動社會發展,提升市民生活質素。機電署尤其在本港創科發展擔當重要的角色,以身作則引領業界持續推進創科變革,惠及業界乃至廣大市民。隨着社會繼續進步,更多的機電和環保節能建設將相繼落成啓用,機電署的重要性將更見突顯。

我深信機電署將一如既往,悉力以赴為本港的機電安全與環保節能做好「把關者」和「促進者」的角色,同時培育更多優秀機電專才,推動業界守正創新,建設可持續發展的更美好香港。

My warmest congratulations to the Electrical and Mechanical Services Department on its 75th Anniversary this year.

Hong Kong is an open and free international metropolis connecting Mainland China with the rest of the world. It is a city full of not just development opportunities, but also world-class electrical and mechanical (E&M) facilities which have long been integrated into our everyday life. Over the past 75 years, the Department has been spearheading the development of high-quality and safe E&M engineering solutions and services in society. I am proud of having this diligent, professional and highly effective E&M team in the Government.

To build Hong Kong into a world-class smart city, the Department has been striving to innovate along government policy directions in such areas as infrastructure, environmental protection and energy efficiency, innovation and technology (I&T), and nurturing of talent. Its efforts have contributed to Hong Kong's development on various fronts to enhance people's quality of life. In particular, the Department plays an important role in the I&T development of the city, leading industries by example to continuously achieve innovations and breakthroughs for the benefits of the trade and people. As society continues to advance, more E&M and energy-efficient facilities will come on stream. The importance of the Department's role will become increasingly apparent.

I strongly believe that the Department will continue to steadfastly discharge their roles as gatekeeper and facilitator in ensuring E&M safety and energy efficiency in Hong Kong, while grooming more outstanding E&M talent and promoting I&T adoption in the trade at the same time, for the sustainable and promising development of Hong Kong.

陳園基

陳國基 政務司司長

Ein Chan.

Eric CHAN Kwok-ki

The Chief Secretary for Administration

賀辭 CONGRATULATORY MESSAGES



欣逢機電工程署(機電署)成立七十五周年,謹此衷心致賀。

機電署成立於一九四八年,前身為機電工程處,從昔日政府架構中一個規模細小的單位,發展至今天成為一個提供全面和多元服務的部門。機電署有兩大職能,除為政府部門和公營機構提供機電工程服務外,也負責規管全港機電裝置的安全運作,在提升市民生活質素和確保機電安全兩方面都不遺餘力,成績斐然。

多年來,機電署在保護環境方面努力不懈,不斷求進,殊堪稱許。憑着創新思維和求變精神,機電署積極提倡運用創新科技以提升能源效益,大力推動節能工作,在應對氣候變化和促進可持續發展方面貢獻良多,成績有目共睹。

際此七十五周年之慶,我衷心感謝機電署所有同事多年來努力耕耘、克盡 厥職,深信在未來日子,機電署會繼往開來,續創佳績。 I would like to extend my warmest congratulations to the Electrical and Mechanical Services Department (EMSD) on its 75th anniversary.

Established in 1948 under the name "Electrical and Mechanical Office", the EMSD has evolved from a small government unit into a sophisticated department offering comprehensive and diversified services. Playing a dual role of a provider of electrical and mechanical engineering services to government departments and public sector organisations as well as a regulatory body, the EMSD has gone a long way in improving the quality of life of the public and ensuring electrical and mechanical safety in Hong Kong.

Of the numerous distinguished achievements made by the EMSD over the years, special recognition should be given to its relentless efforts made in environmental protection. With an innovative mindset and readiness to embrace changes, the EMSD has made sterling contributions to advancing the cause of energy conservation by promoting the application of innovative technologies to enhance energy efficiency. Its dedication and commitment to combating climate change and fostering sustainable development is, no doubt, highly commendable.

On this special occasion, may I pay tribute to all former and serving staff members in the EMSD for their hard work and selfless devotion to duty. I have every confidence that the EMSD will, building on its solid foundation, continue to thrive and flourish in the years to come.

噪发波

陳茂波

財政司司長

fue

Paul CHAN Mo-po

The Financial Secretary



在機電工程署(機電署)迎來七十五周年鑽禧之際,謹致以衷心祝賀。

過去七十五年,機電署的職能隨着城市發展而不斷擴大,由最初的機電服務提供者,演進到後來的節能減排倡導者,近年更擔當創新促成者的角色。機電署建立了不同平台,與其他政府部門、機電業界和學術界合作,推動創新科技的發展和應用,成果屢獲本地和國際認許。機電署與有關各方所作的努力,不僅增強了香港的競爭力,亦有助促進城市的可持續發展,提升市民的生活質素。我有幸親眼見證機電署本着追求卓越和積極求變的精神為市民服務,深信機電署的成就可媲美香港以至全球最頂尖的機構。

我期望機電署繼續與其他部門攜手並肩,一同為香港的未來發展描繪更宏大的藍圖。

My heartfelt congratulations to the Electrical and Mechanical Services Department (EMSD) on its Diamond Jubilee.

Over the past seven and a half decades, the EMSD's scope of functions has expanded in tandem with the city's development, from being a provider of electrical and mechanical (E&M) services, to an advocate of energy conservation, and subsequently to a facilitator of innovation in recent years. What deserves special mention is that the department has established various platforms to promote the development and application of innovative technologies in collaboration with other government departments, E&M trade and academia, winning both local and international recognition for their exemplary innovative solutions on numerous occasions. These endeavours have not only enhanced Hong Kong's competitiveness, but also fostered the city's sustainable development, and enhanced people's quality of life. I have the privilege of witnessing firsthand the department's unwavering pursuit of excellence and positive changes in serving the community, and I can confidently say that its achievements compare well with the best in Hong Kong and worldwide.

I look forward to continued collaboration between the EMSD and other departments in mapping out an even greater blueprint for Hong Kong's future development.



財政司副司長 Deputy Financial Secretary



我衷心祝賀機電工程署成立七十五周年!機電署和同事們一直努力不懈,以專業態度和創新思維, 為香港發展作出重要貢獻。在促進可持續發展、推動創新科技,以及推廣能源效益等方面,機電署 奮力不懈,成果有目共睹。香港正邁向精彩新里程,我祝願機電署及同寅砥礪前行,為香港成為更 繁榮、更宜居的城市而努力。

I would like to extend my sincere congratulations to the Electrical and Mechanical Services Department (EMSD) on its 75th Anniversary. Thanks to steadfast professionalism and innovative mindset of management and colleagues, EMSD has made enormous contributions to Hong Kong's development. Your unremitting efforts are well recognized in the achievements in sustainable development, innovation and advanced technologies, as well as energy efficiency. As Hong Kong makes strides towards bright new milestones, I am confident that EMSD and colleagues will continue their good work in making our city more vibrant and liveable.

甯漢豪 Bernadette LINN Hon-ho

發展局局長 Secretary for Development

賀辭 CONGRATULATORY MESSAGES



衷心祝賀機電工程署成立七十五周年。多年以來,機電署在提升能源效益和節能減碳方面一直不遺餘力,為香港應對氣候變化挑戰作出重要貢獻。近年機電署不但協助政府部門引進各綠色科技,更積極推動重新校驗及節能改造以提高建築物能源效益,成效顯著,對香港2050年前實現碳中和目標發揮重要作用。我們期待與機電署繼續攜手,共同推進可持續發展與環境保護工作,讓香港成為全球綠色城市的典範。

My heartfelt congratulations to the Electrical and Mechanical Services Department (EMSD) on its 75th anniversary. Over the years, the EMSD has spared no effort in enhancing energy efficiency and reducing carbon emissions, making significant contributions to Hong Kong's response to the challenge of climate change. In recent years, the EMSD has not only assisted government departments in adopting various green technologies but also actively promoted retro-commissioning and retrofitting to improve building energy efficiency. These efforts have achieved remarkable results and played a crucial role in Hong Kong's endeavours to achieve carbon neutrality before 2050. We look forward to collaborating closely with the EMSD to advance sustainable development and environmental protection, making Hong Kong a world-renowned model green city.



恭賀機電工程署(機電署)七十五周年誌慶!機電署一直致力推動業界創新發展,積極擔當政府的「創新促成者」角色,當中包括設立「機電創科網上平台」,支援各政府部門及公營機構加強與創科界別的協作,鼓勵創科文化。

七十五年來,機電署一直追求卓越,保持創新,致力為市民及機構提供安全、可靠的機電工程服務。 我衷心向各位同事致以最熱烈的祝賀和最誠摯的感謝!

我相信,在各位同事的共同努力下,機電工程署將繼往開來,為香港機電工程的發展創造更光明的 未來。

Congratulations to the Electrical and Mechanical Services Department (EMSD) on its 75th anniversary! EMSD has always been committed to promoting innovation in the industry and has played an active role as the government's "Innovation Facilitator", which includes the setting up the "E&M InnoPortal" to strengthen the collaboration between government departments and public bodies with the I&T sector and to promote an innovative culture.

For over 75 years, EMSD has strived for excellence and innovation in providing safe and reliable electrical and mechanical engineering services to the public and organisations. My heartfelt congratulations and sincere gratitude to all EMSD colleagues!

I believe that with the concerted efforts of all colleagues, EMSD will continue to build on its successes and create a brighter future for the development of electrical and mechanical engineering in Hong Kong.

謝展寰 TSE Chin-wan

環境及生態局局長 Secretary for Environment and Ecology

孫東 SUN Dong

創新科技及工業局局長 Secretary for Innovation, Technology and Industry



欣逢機電工程署(機電署)七十五周年誌慶,我在此致以衷心祝賀。

機電署一直致力維持本港的交通運輸系統安全可靠和環保高效。除了監管鐵路安全及維護道路運輸基建的機電系統,機電署在協助處理公共運輸緊急事故及推動「智慧出行」(包括實施「易通行」不停車繳費服務)方面亦不遺餘力,貢獻尤甚。我期待未來與機電署繼續攜手合作,共同推動智能運輸發展,加強創新科技於運輸及物流領域的應用,為香港以至國家發展帶來更多機遇。

I would like to extend my heartfelt congratulations to the Electrical and Mechanical Services Department (EMSD) on its 75th anniversary.

The EMSD is committed to maintaining a safe, reliable, environmentally friendly and efficient transport system in Hong Kong. Apart from regulating railway safety and maintaining the electrical and mechanical systems of our road transport infrastructure, the EMSD has also spared no effort in dealing with public transport emergencies and taking forward "Smart Mobility" initiatives, including the implementation of "HKeToll", a free-flow tolling service. I look forward to continuing our collaboration with the EMSD in the future, working together to promote the development of intelligent transport and enhance the application of innovative technologies in the transport and logistics sectors, thereby bringing more opportunities to the development of Hong Kong and our country.



七十五年來,機電工程署一直本着精益求精及靈活創新的信念提供優質機電工程服務,並以嚴謹的 尺度進行規管工作,確保機電安全及能源得以善用,為市民提供最佳的保障。近年,該署推出的機 電創科網上平台廣受好評,多項發明在國際展覽中屢獲殊榮,同事們靈活創新的精神和多年來的努 力得到充分肯定。

欣逢機電工程署鑽禧之慶,我衷心祝願該署全體同事能繼往開來,全力發揮創新促成者角色,支援 各部門落實智慧城市措施和實現碳中和,推動香港不斷向前邁進。

The Electrical and Mechanical Services Department (EMSD) has been delivering quality electrical and mechanical (E&M) services over the past 75 years in pursuit of excellence, agility and innovation. Its endeavours to ensure E&M safety and energy efficiency through regulation based on strict standards have provided the public with the best protection. In recent years, the E&M InnoPortal launched by the department has received wide acclaim, while a number of its innovations have won prestigious awards in international exhibitions, which is full recognition of the agile and innovative mindset of our colleagues as well as their untiring efforts over the years.

On its 75th anniversary, I sincerely wish the EMSD even greater success in future in playing its role as the innovation facilitator within the Government by supporting other departments in implementing smart city initiatives and achieving carbon neutrality, thus driving the progress of Hong Kong.

林世雄 LAM Sai-hung

運輸及物流局局長 Secretary for Transport and Logistics 楊何蓓茵 Ingrid YEUNG HO Poi-yan

公務員事務局局長 Secretary for the Civil Service



署長獻辭 MESSAGE FROM THE DIRECTOR

精工卓術服務香江七十五載

七十五年來,機電工程署一直默默耕耘,竭誠為香港服務,包括擔任政府的技術顧問;做好機電安全的把關工作;協助提高能源效益,以實現碳中和;推動機電創新科技進步;以及充當香港與內地及地區當局的超級聯繫人,促進機電發展合作。

機電署七十五年來的成就,建基於薪火相傳的核心服務價值和文化,還有賴前輩不吝分享知識和最佳工作模式;所有同事熱衷開發創新解決方案,以應對機電挑戰;以及部門上下時時刻刻克盡公務員的職責,運用機電專業知識貢獻所長,盡心服務和造福社會、業界和持份者。本署人員鞠躬盡瘁、努力不懈,支持香港跨越許多前所未有的難關,包括過去幾年的數波疫情,以及最近的極端天氣挑戰,我謹向他們摯誠致意。

我們會秉承追求專業卓越的傳統,加強「治未病」的文化,這是提升機電安全的最有效工具;同時,我們會繼續為在其他範疇服務市民的政府部門,提供有效及增值的機電服務。在能源效益工作方面,我們會繼續站在最前線,協助引入新及潔淨能源的應用,並透過機電創新,把握所有節能機會,獻力邁向碳中和目標,以及減輕氣候變化的影響。

過去七十五年的每一次考驗,都讓機電署全體人員獲得寶貴的經驗,並裝備我們更妥善地應對未來的挑戰。我衷心感謝各決策局的指導和支援,以及其他政府部門和機電業界堅定不移的信任和支持。我們會在各持份者共同努力建立的鞏固基礎上砥礪前行,鋭意在保障社會福祉方面發揮所長。

誠如機電署七十五周年的主題「傳承創新同心惠民」所言,我們致力向部門同事和業界傳授知識和經驗,積極秉持卓越的機電服務水平。

黄龙

機電工程署署長

Serving Hong Kong with Technical Excellence for 75 Years

For 75 years, the Electrical & Mechanical Services Department has been making dedicated efforts in its role as the Government's technical advisor, the gatekeeper of electrical and mechanical (E&M) safety, the facilitator of energy efficiency enhancement for achieving carbon neutrality, the driver of E&M innovation and technology advancement, and the super-connector with Mainland and Regional authorities in fostering collaboration on E&M development.

Our achievements over 75 years are a result of the succession of our core service value and culture, the unreserved sharing of the knowledge and best practices by our predecessors, the eagerness of all our colleagues to pioneer innovative solutions to meet E&M challenges, and the dedication of everyone in the Department to serve and benefit the community, our trade and stakeholders, not only with our E&M expertise but also wherever we could contribute as civil servants. I must thank our colleagues for their dedication and tireless efforts in supporting Hong Kong through unprecedented challenges such as those we had gone through during different waves of the epidemic in the past few years and the extreme weather challenges in the recent period.

Staying true to our heritage of striving for professional excellence, we would deepen our culture of preventative treatment as the most effective tool for enhancing E&M safety, and would continue to offer effective and value-added E&M services to other government departments serving the public in different areas. We remain at the forefront of facilitating the introduction of new and clean energy applications as well as exploiting all energy-saving opportunities through E&M innovation to help push forward the carbon neutrality goals and mitigate the impact of climate change.

Every lesson learnt over the past 75 years enriches our collective experience and better equips us to overcome future challenges. I whole-heartedly appreciate policy bureaux for their guidance and support, as well as the unwavering trust and support of other government departments and the E&M trade. We will continue to build on the solid foundation forged by the concerted efforts of all stakeholders, and are determined to excel in our different roles in protecting the well-being of the community.

Echoing the theme of our 75th anniversary, "Serving the Community with Heart and Innovation", we are dedicated to passing on our knowledge and experience to colleagues and the trade and to uphold E&M excellence.

PANG Yiu-hung

Director of Flectrical and Mechanical Services

歷任署長賀辭

CONGRATULATORY MESSAGES FROM FORMER DIRECTORS



郭炳基 Albert KWOK Ping-ki

技光驅

精盆水精



梁湛添 LEUNG Cham-tim



黎仕海 Roger LAI Sze-hoi

公共機電設施可靠運作市民家居裝備安全節能

裕國建港惠民生繼往開來展宏圖



何光偉 HO Kwong-wai

與時俱進革故鼎新運籌有策實幹為民



陳鴻祥 Stephen CHAN Hung-cheung



陳帆 Frank CHAN Fan

念轉乾坤 機電創新心繁社群 砥礪前行

民生繁我心 不斷創新七十五載情 初心未改



薛永恒 Alfred SIT Wing-hang



機電工程署里程碑

EMSD MILESTONES



工務司署轄下的電氣處、機械處和運 輸處合併為機電工程處(機電處),工 場及總部設於加山車房。當時機電處 有70名月薪和630名日薪僱員, 並由 一名總機電工程師負責管理。

The Electrical, Mechanical and Transport Offices under the Public Works Department (PWD) were amalgamated into the Electrical and Mechanical Office (EMO) with the workshop and headquarters located at the Caroline Hill vehicle workshop. The EMO had 70 monthly-rated employees and 630 dailyrated employees under a Chief Electrical and Mechanical Engineer.

工務司署轄下的機電處、九廣鐵路部

和水務部聯合舉辦第一屆「政府學徒

The EMO, the Kowloon-Canton Railway

Division and the Water Supplies Division

under the PWD jointly organised the first

Government Apprenticeship Training



《升降機及自動梯(安全)條例》生效。 機電處負責監管升降機及自動梯的安 全運作。

The Lifts and Escalators (Safety) Ordinance came into force. The EMO is responsible for regulating the safe operation of lifts and escalators.



加路連山道總部大樓落成,一直沿用 至2005年。

The Headquarters building at Caroline Hill Road was completed and put in use until

1968



《架空纜車(安全)條例》生效。

機電處負責規管架空纜車的設計、製 诰、安裝,以及操作和保養。

The Aerial Ropeways (Safety) Ordinance came into force.

The EMO is responsible for regulating the design, manufacture, installation, as well as operation and maintenance of aerial ropeways.

1982





1991

《電力條例》生效,取代《電力供應條

機電署負責電業工程人員、電業承辦 商和發電設施的註冊事宜,以及監管 電力供應、線路裝設和電氣產品的安 全規格。

The Electricity Ordinance came into force, replacing the Electricity Supply Ordinance. The EMSD is responsible for the registration of electrical workers, contractors and generating facilities, as well as the regulation of electricity supply, electrical wiring and product safety requirements.

訓練計劃」。

Scheme.

醫院服務組成立,主要為醫院的蒸 氣、醫療儀器和空調及電力設備提供 操作及維修服務。

The Hospital Services Unit was established to mainly provide operation and maintenance services for steaming, medical devices as well as airconditioning and electrical equipment at hospitals.



機電處引入第一批半電子化交通燈 取代由警員人手操作交诵指揮亭。

The EMO introduced the first batch of semi-electronic traffic lights, replacing the traffic pagodas manually operated by police officers.



工務司署分拆為多個執行部門,「機電 處」升格為「機電工程署」(機電署)。

The PWD was split up into several executive arms. The EMO was upgraded to the Electrical and Mechanical Services Department (EMSD).



《氣體安全條例》生效。

1990

機電署負責規管氣體的進口、生產、 儲存、運送、供應和使用。

The Gas Safety Ordinance came into force.

The EMSD is responsible for regulating the importation, manufacture, storage, transport, supply and use of gas.









設立能源效益事務處,積極推廣能源

The Energy Efficiency Office was established to actively promote energy efficiency.

1994



《建築工地升降機及塔式工作平台(安 全)條例》生效。

機電署負責規管建築工地升降機及塔 式工作平台的設計、構造、安裝、維 修、操作、檢驗和測試。

The Builders' Lifts and Tower Working Platforms (Safety) Ordinance came into

The EMSD is responsible for regulating the design, construction, installation, maintenance, operation, examination and testing of builders' lifts and tower working platforms.

1996



推行自願性「建築物能源效益註冊計 劃|,鼓勵發展商和建築師採用節能的 建築設計。

The voluntary Energy Efficiency Registration Scheme for Buildings was launched to encourage developers and architects to adopt energy-efficient building designs.



機電工程營運基金成為首個獲得ISO 9001 品質管理系統及 ISO 14001 環境管 理系統企業認證的政府部門, 彰顯其 對品質及環保的重視和成績。

The EMSTF became the first government department to obtain corporate certification of ISO 9001 Quality Management System and ISO 14001 Environmental Management System, demonstrating its emphasis on and achievements in quality and environmental protection.

機電工程署

2000



2001

為建立一個清晰及連貫的企業形象, 機電署推出嶄新的企業標誌。

A new corporate identity was launched to establish a clear and consistent corporate image.

bbb 《機動遊戲機(安全)條例》生效。

機雷署負責規管機動游戲機的設計、 製造、安裝、操作、保養和檢查。

The Amusement Rides (Safety) Ordinance came into force.

The EMSD is responsible for regulating the design, manufacture, installation, operation, maintenance and examination of amusement rides.



機電工程營運基金成立。

1995

Establishment of the Electrical and Mechanical Services Trading Fund (EMSTF).



香港國際機場遷往赤鱲角。

1998

機電工程營運基金繼續為機場管理局 及民航處等政府部門提供機電服務。

>>>

1998

Relocation of Hong Kong International Airport to Chek Lap Kok.

The EMSTF continued to offer electrical and mechanical (E&M) services to the Airport Authority and government departments, such as the Civil Aviation Department.



《石油(保存及管制)條例》

1999

機電署負責監管石油的供應與使用, 以及保存石油供應。

>>>

2000

The Oil (Conservation and Control) Ordinance

The EMSD is responsible for regulating the supply and use of oil, and the conservation of oil supplies.



機電工程營運基金獲得OHSAS 18001 職業健康安全管理系統企業認證(其 後更新至ISO 45001 認證), 鞏固我們 作為負責任的企業公民和本地職業安 全健康先鋒的角色。

The EMSTF obtained OHSAS 18001 Occupational Health and Safety Management System corporate certification (later upgraded to ISO 45001),

cementing our role as a responsible corporate citizen and a local occupational health and safety pioneer.





嚴重急性呼吸系統綜合症(沙士)襲港。

在抗疫行動中,機電署各部別的員工 都竭盡所能貢獻所長,例如為各醫院 提供必需的機電服務、改裝各醫院的 空調系統,以及為救護車進行消毒和 保養維修。

Outbreak of the severe acute respiratory syndrome (SARS) in Hong Kong.

During the anti-SARS campaign, staff from various divisions of the EMSD made every effort to contribute our expertise, for instance, providing the necessary E&M services to hospitals, modifying the airconditioning systems of hospitals, and providing disinfection, repair and maintenance services for ambulances.



與國家質檢總局簽訂合作安排,加強 機電產品及設備的安全。

A co-operation arrangement was concluded with the State General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ), to strengthen safety of E&M products and equipment.



機電工程營運基金獲香港管理專業協會頒發優質管理金獎,為首個榮獲此殊榮的政府部門。

The EMSTF won the Gold Award of the Hong Kong Management Association Quality Award. The EMSD was the first government department to receive this award.

2007



鐵路科成立,負責監管鐵路、香港電車和山頂纜車。

The Railways Branch was established to regulate railways, the Hong Kong Tramways and the Peak Tram.



《建築物能源效益條例》生效。

機電署負責規管若干類型的建築物,監督其遵行關於空調裝置、電力裝置、升降機及自動梯裝置和照明裝置的能源效益,以及能源審核的《守則》。

The Buildings Energy Efficiency Ordinance came into force.

The EMSD is responsible for regulating compliance with codes of practice concerning the energy efficiency of airconditioning installations, electrical installations, lift and escalator installations and lighting installations, and energy audits in respect of several types of buildings.



2003

就住宅使用的氣體用具制訂強制性的 批准計劃。所有住宅氣體用具均需附上「GU標誌」,以資識別,確保產品已 達國際認可的安全標準。

A mandatory approval system for domestic gas appliances was established. All domestic gas appliances have to bear the

"GU Mark", an assurance of internationally recognised safety standards, for identification.





總部遷至九龍灣前啟德機場2號空運 省站大樓。

2005

2003

Relocation of the headquarters to Air Cargo Terminal 2 Building at the former Kai Tak Airport, Kowloon Bay.





設立「車輛維修註冊組」,負責有關「車輛維修技工自願註冊計劃」及「車輛維修工場自願註冊計劃」的推廣、日常管理和運作,以進一步提升車輛維修業的服務質素及專業形象。

The Vehicle Maintenance Registration Unit was established to undertake the promotion, daily management and operation in respect of the Voluntary Registration Scheme for Vehicle Mechanics (VRSVM) and the Voluntary Registration Scheme for Vehicle Maintenance Workshops (VRSVMW), with the aim of further enhancing the service quality and professional image

of the vehicle maintenance trade.



《能源效益(產品標籤)條例》生效。

機電署負責監管「強制性能源效益標 籤計劃」的執行,該計劃現涵蓋11類 訂明產品。

The Energy Efficiency (Labelling of Products) Ordinance came into force.

The EMSD is responsible for overseeing the implementation of the Mandatory Energy

Efficiency Labelling Scheme, which currently covers 11 types of prescribed products.

2008



《升降機及自動梯條例》取代《升降機及自動梯(安全)》條例。

2012

2011

機電署負責監管升降機及自動梯的安全(包括為進行升降機及自動梯工程, 而為承辦商、工程師及工程人員註 冊)。

The Lifts and Escalators (Safety) Ordinance was replaced by the Lifts and Escalators Ordinance.

The EMSD is responsible for regulating the safety of lifts and escalators, including the registration of contractors, engineers and workers for the purposes of carrying out lift and escalator works.







《區域供冷服務條例》生效。

機電署負責政府提供的區域供冷服務的相關事宜,包括就該服務收費。

The District Cooling Services Ordinance came into force.

The EMSD is responsible for matters relating to district cooling services provided by the Government, including the imposition of charges for the services.



機電署成立「創新辦公室」及推出「機電創科網上平台」,為機電業推廣創新科技,並在機電署總部大樓設了「機電創科專區」,展示多個與本港學術及科研機構合作研發的創料項目。

The EMSD established the Inno-Office and launched the E&M InnoPortal to promote I&T in the E&M trade. An E&M InnoZone was set up at the EMSD Headquarters to showcase various I&T projects developed in collaboration with local academic and research institutions.

2019



機電工程營運基金獲得ISO 45001 職業健康安全管理系統及ISO 37001 反賄賂管理系統的企業認證,綜合管理系統更臻完善。

The EMSTF obtained corporate certification of ISO 45001 Occupational Health and Safety Management System and ISO 37001 Anti-bribery Management System, which enhances the Integrated Management System.

2021



首個區域數碼監控中心成立,利用大數據分析和人工智能處理機電設備數據。

The first Regional Digital Control Centre was established for handling data of E&M equipment with the application of big data analytics and artificial intelligence (Al).



機電署發布8份優良操作和維修作業 手冊及指引,內容涵蓋電氣裝置、消 防裝置及設備、暖通空調裝置、升降 機及自動梯裝置、氣體設施、太陽能 機可系統、太陽能熱水系統和石油氣 車輛燃料系統。

The EMSD published the 8 O&M Best Practices Booklets and Handbooks, covering electrical installations; fire service installations; heating, ventilation and airconditioning installations; lift and escalator installations; gas utilisation facilities; solar photovoltaic systems, solar water heating systems; and fuel system of liquefied petroleum gas vehicles.

2015 >>> 2017

舉辦首次「機電·啟航」迎新典禮,歡 迎500多位年輕的見習技術員加入機 電業界,並邀得資深工程人員與見習 技術員分享經驗。

The first "E&M GO!" Orientation Ceremony was held to welcome over 500 young technician trainees on board the E&M trade. Experienced engineering personnel were invited to share their experience with the trainees.



機電署總部地下的「技能評估中心」(又 名新學師樓) 啟用,為見習技術員提 供基礎技能訓練及評估。

The Skill Assessment Centre (also known as the new Apprentice Training Centre) on the G/F of the EMSD Headquarters was put into operation, providing basic skill training and assessment for our technician trainees.





機電署吉祥物「機智啤啤」和「智析寶寶」加入機電署大家庭,向公眾宣揚 創科、機電安全及能源效益。

2019

Witty Bear and KnowBot, the mascots of the EMSD, joined the EMSD family to promote I&T, E&M safety and energy efficiency to the public.



機電署與廣東省科學技術協會聯合舉辦「國際建築機電人工智能大挑戰」, 推進建築機電人工智能的應用,並在活動上啟動機電人工智能實驗室,加快建 築機電行業的大數據和人工智能發展。

The EMSD and the Guangdong Provincial Association for Science and Technology jointly organised the Global Al Challenge for Building E&M Facilities to advance Al application in building E&M facilities, and inaugurated the E&M Al Lab at the event to accelerate big data and Al development in the building E&M industry.



成立機電青年發展委員會,以推動青年發展工作,凝聚青年力量。

The E&M Youth Development Committee was established to promote youth development and harness the power of young people.





培育後晉 成就卓越

INGERITANCE

A Legacy of Nurturing and Fostering Excellence

傳承半世紀的睿智

曾慶華先生(左三)於 1973 年加入機電工程處(機電工程署(機電署)前身)成為見習工程師,黃炳坤先生(左一)、莊錫鑫先生(右六)、劉國明先生(右三)和張品儉先生(右一)則是 1955 年入職第 1 屆機電工程學徒的 4 位大師兄。幾位前輩到訪 2019 年落成的新「學師樓」—— 技能評估中心,指導一眾年輕見習技術員和見習工程師,傳授跨越半世紀的機電智慧和技術。

Passing on Wisdom of Half a Century

Mr Tseng Hing-wah (third left), who joined the Public Works Department (the predecessor body of the Electrical and Mechanical Services Department (EMSD)) as a trainee engineer in 1973, together with 4 veterans, Mr Wong Ping-kwan (first left), Mr Chong Sik-ham (sixth right), Mr Lau Kwok-ming (third right) and Mr Cheung Bun-kim (first right), who became the first batch of electrical and mechanical (E&M) engineering apprentices in 1955, visited the Skill Assessment Centre (the new "apprentice basecamp") completed in 2019, guiding a group of young technician trainees and engineering graduates by sharing their wisdom and technical expertise accumulated over half a century.



參與1955年第1屆「政府學徒訓練計劃」的4位前輩(左起)莊錫鑫先生、劉國明先 生、張品儉先生和黃炳坤先生到訪於2019年落成的新「學師樓 | Four veterans, (from left) Mr Chong Sik-ham, Mr Lau Kwok-ming, Mr Cheung Bun-kim and Mr Wong Ping-kwan, who participated in the first Government Apprenticeship Training Scheme in 1955, visited the Skill Assessment Centre (the new "apprentice basecamp") completed in 2019.





互動學習中心 Interactive Learning Centre



技能發展中心 **Skill Development Centre**

孕育專才 知識傳承

Nurturing Talent: Knowledge Transfer in the Industry

機電署一直肩負培育人才的使命,致力提升業界的軟實力。自 1955 年起,本署已積極發展學徒訓 練計劃,傳承累積多年的經驗與智慧。

時至今日,因應創科新趨勢,機電署鋭意為培訓計劃注入新科技、新思維,分別於 2018 年和 2019 年設立互動學習中心和技能評估中心,在數碼化的學習空間培育人才,打造薪火相傳的培訓基地。 此外,技能發展中心於2020年2月正式投入服務,提供符合世界技能大賽標準的場地作為培訓基地, 包括空調製冷培訓基地和電氣安裝培訓基地;另設有數碼訓練中心,配備先進的數碼科技培訓設施, 以提升學員的技術水平。

The EMSD has always been dedicated to cultivating talent and enhancing the industry's soft power. Since 1955, the Department has actively developed apprentice training programmes, passing on years of accumulated experience and wisdom.

In response to emerging trends in I&T nowadays, the EMSD is committed to injecting state-of-the-art technologies and fresh perspectives into training programmes. The Interactive Learning Centre and the Skill Assessment Centre were established in 2018 and 2019 respectively to nurture talent in digital learning spaces, creating a training hub for the succession of knowledge. In addition, the Skill Development Centre was put into operation in February 2020, providing venues that meet the standards of the WorldSkills Competition as training bases, including the Refrigeration and Air-Conditioning Training Base and the Electrical Installations Training Base, as well as featuring a Digital Training Centre equipped with advanced digital technology training facilities to enhance the technical skills of trainees.

> 數碼訓練中心 **Digital Training Centre**







技能評估中心 **Skill Assessment Centre**

這些培訓中心配備尖端的創科裝置, 而互動學習中心更利用全息影像及三 維投影技術,為機電署的員工和見習 技術員營造有利環境,增進個人的技 能,並豐富部門的知識庫,把機電署 75年以來累積的機電智慧發揚光大。

These training centres are equipped with state-of-the-art I&T devices, while the Interactive Learning Centre utilises hologram technology, creating a favourable environment for the staff and technician trainees of the EMSD to enhance their skills and enrich the Department's knowledge base, harnessing the wisdom in the E&M discipline accumulated over the past 75 years.

全息影像及三維投影 Hologram system





機電優良作業推廣典禮 Electrical & Mechanical Best Practices Ceremony



訓練裝置(虛擬實境) Training equipment (Virtual Reality)





此外,機電署在 2022 年發布一套 8 本《優良操作 和維修作業手冊及指引》,凝聚業界智慧和力量, 推廣優質的作業模式,促進業界發展。

In addition, in 2022, the EMSD released a set of 8 Operation and Maintenance (O&M) Best Practices Booklets and Handbooks in an effort to consolidate industry expertise, promote quality operational practices and facilitate the industry development.



香港機電業推廣工作小組的嘉賓在 機電業博覽2023開幕禮上合照。

A group photo of the Hong Kong Electrical and Mechanical Trade Promotion Working Group was taken at the opening ceremony of the E&M Expo 2023.



中學生與社工一起參觀展覽攤位,了解機電業的發展情況。 Secondary students and social workers visited the exhibition booth to learn more about the development of the E&M industry.



發展業界 廣納人才

Industry Development and Talent Acquisition

機電署致力以卓越的機電技術引領業界邁步向前,透過舉辦多元化的職業博覽、研討會和合作項目,擴大吸納人才的渠道。

為吸引新血加入機電行業,本署為業界代表建構平台,並與他們合辦「機電業博覽」,介紹行業的工作範疇、就業前景、晉升機會、培訓和進修資訊,鼓勵年輕人入行發揮所長,實現理想。

本署更與於 2012 年成立的香港機電業推廣工作小組合辦「機電·啟航」,廣納年輕新世代,培育 他們成為機電業技術人才。

The EMSD is dedicated to leading the industry forward with excellent E&M technology. By organising diverse career expos, seminars and collaborative projects, the EMSD aims to broaden the channels for talent acquisition.

To attract young people to the E&M industry, the EMSD has created a platform for various trade representatives and co-organised with trade members the E&M Expo, which introduced the scope of work, employment prospects, promotion opportunities, as well as information about training and continuous learning in the industry, so as to encourage youngsters to join the field to unleash their potential and fulfil their aspirations.

In collaboration with the Hong Kong Electrical and Mechanical Trade Promotion Working Group, which was formed in 2012, the EMSD also organised the "E&M Go!" to agglomerate young talent and equip them with the necessary skills for the E&M industry.



「機電·啟航」2023大合照。 A group photo taken at the "E&M Go!" 2023.

「機電·啟航」是機電署與業界合辦的年度重點活動 旨在歡迎加入機電行業的年青人。

The "E&M Go!" is an annual signature event co-organised by the EMSD and trade members to welcome the youngsters joining the E&M industry.

飛躍國際 促進交流

Promoting International Collaboration through Enhanced Communication

由 2018 年至今,機電署與廣州市人力資源和社會保障局(人社局)已簽訂多項合作備忘錄,深化兩地在發展機電人才方面的協作交流。合作內容包括共同推進技術人員培訓,加強世界技能大賽選手集訓,以及為機電從業員開發新科技的培訓課程。我們藉此攜手提升本港以至粵港澳大灣區的機電服務質素和水平,同時促進城市可持續發展,實現節能減排的目標。

機電署與人社局在2023年5月召開深化機電人才發展合作聯席會議,確立來年的工作計劃。

Since 2018 till now, the EMSD has signed several memoranda of co-operation with the Guangzhou Municipal Human Resources and Social Security Bureau (HRSSGZ) to deepen co-operation and exchanges in E&M talent development between the two places. The areas of collaboration include jointly boosting the training for technicians, strengthening the training in preparation for the WorldSkills Competition and developing training courses on new technology for the E&M practitioners. Through such partnership, we strive to enhance the quality and standards of E&M services in Hong Kong and the Guangdong-Hong Kong-Macao Greater Bay Area, while promoting sustainable urban development and achieving energy saving and emission reduction targets.

In May 2023, the EMSD and the HRSSGZ held a joint meeting to deepen co-operation in E&M talent development and established the work plan for the following year.

考察團參觀中海海創智造科技(珠海)有限公司,重點了解機電裝備 合成法模組的生產流程。

The delegation visited the China Overseas Innovation & Technology (Zhuhai) Company Limited and was briefed on the production processes of the MiMEP modules.





團員率先參觀仍在施工的「三館合一」 地標項目(「三館」指廣東美術館、 廣東非物質文化遺產展示中心和廣東文學館)。這項目在機電管線等關 鍵工序中充分利用建築信息模擬技術,以提升安裝工程的精準度。

The delegation visited the construction-in-progress "three museums in one" landmark project amalgamating the Guangdong Museum of Art, the Guangdong Intangible Cultural Heritage Exhibition Centre and the Guangdong Museum of Literature. This project utilised BIM technology in key processes, such as those involving E&M ducts and pipes, to improve the accuracy of the installation works.

深化機電人才發展合作聯席會議於2023年5月舉行。 The joint meeting to deepen co-operation in E&M talent development was held in May 2023.



《機電人才發展 合作備忘錄》於 2018年簽署。

The Memorandum of Co-operation on E&M Talent Development was signed in 2018.





《深化機電人才發展合作備 忘錄》於2020年簽署。

The Memorandum of Cooperation on Enhanced E&M Talent Development was signed in 2020.

為了讓年青新生代了解內地機電創科及高新技術的發展,機電署為同事安排大灣區考察團,分別參觀當地的創科企業、科研單位、初創企業和產業基地,讓他們了解和探索大灣區的創科發展、生態圈和政策。考察團不但參觀中海海創智造科技(珠海)有限公司,重點了解機電裝備合成法模組的生產製作流程,還有機會率先參觀仍在施工的「三館合一」項目(「三館」指廣東美術館、廣東非物質文化遺產展示中心和廣東文學館),從而了解如何在關鍵施工步驟如結構吊裝和機電管線等深度應用建築信息模擬技術,以提高施工精準度和確保安全。

In order to familiarise the younger generation with the development of E&M I&T and high-technology in the Mainland, the EMSD arranged study tours to the Greater Bay Area for colleagues to visit local I&T enterprises, research institutions, start-ups and industrial bases, so that they could learn more about and explore their I&T development, ecosystems and policies. The delegation visited the China Overseas Innovation & Technology (Zhuhai) Company Limited and was briefed on the production processes of the Multi-trade integrated Mechanical, Electrical and Plumbing (MiMEP) modules. Besides, the delegation had the opportunity to visit the "three museums in one" project, amalgamating the Guangdong Museum of Art, the Guangdong Intangible Cultural Heritage Exhibition Centre and the Guangdong Museum of Literature, which was still under construction. The visit enabled them to understand how the Building Information Modelling (BIM) technology was applied in key processes such as erection of structures and installation of E&M ducts and pipes to improve the accuracy of construction and ensure safety.





機電署見習技術員
於大灣區參與培訓和交流。

Technician Trainees of the FMS

Technician Trainees of the EMSD participated in training and exchanges in the Greater Bay Area.

每兩年一度的世界技能大賽匯聚來自 20 多個國家和地區的機電菁英,較量專業技能和知識,為技術發展開創新篇章。

The biennial WorldSkills Competition brings together E&M elites from over 20 countries and regions to compete in their professional skills and knowledge, opening a new chapter for technological advancement.

機電署的技術員代表香港出戰 Technicians from the EMSD Represented Hong Kong to Compete in the Competition

2017年,機電署首次派出 2 名技術員參加「空調製冷」和「電氣安裝」兩個項目,並由空調製冷專家陪同。在 2022年世界技能大賽特別賽,機電署技術員代表香港奪得「空調製冷」項目優異獎章,總成績名列第 5 位,為香港取得歷來最佳成績。這反映機電署在傳承卓越技術方面的成績,並突顯本署與廣州市人社局共同推進人員培訓的協作成果。

In 2017, the EMSD, for the first time, sent 2 technicians in the company of an expert in air conditioning and refrigeration, to compete in the categories of "Refrigeration and Air Conditioning" and "Electrical Installations". In the WorldSkills Competition 2022 Special Edition, the EMSD technicians representing Hong Kong won a Medallion for Excellence in the "Air Conditioning and Refrigeration" category and achieved the fifth overall, marking the best result Hong Kong has ever achieved. This reflects the EMSD's outstanding achievements in passing on technical excellence and demonstrates the collaborative efforts of the EMSD and the HRSSGZ in jointly enhancing personnel training.

機電署的技術員代表香港出戰2019年世界技能大賽。 An EMSD technician representing Hong Kong in the WorldSkills Competition 2019.



機電署的技術員代表香港出戰2022年世界技能大賽。 An EMSD technician representing Hong Kong in the WorldSkills Competition 2022.





行政長官李家超先生與**2022**年世界技能大賽特別賽的 香港代表隊會面和合照。

The Chief Executive, Mr Lee Ka-chiu, John, met and took a group photo with the Hong Kong team for the WorldSkills Competition 2022 Special Edition.

2019年香港代表團團員與業界成員在俄羅斯 喀山舉行的第45屆世界技能大賽合照留念。

Members of the Hong Kong team and trade members took a group photo in the 45th WorldSkills Competition held in Kazan. Russia in 2019.



機電署於2023年3月主辦亞太經合組織能源效益及 節能專家小組第60次會議。

The EMSD hosted the 60th Meeting of the APEC Expert Group on Energy Efficiency and Conservation in March 2023.







機電署副署長/規管服務潘國英先生(右一) 陪同環境及生態局局長謝展寰先生(左一), 於2023年8月出席第13屆亞太 經合組織能源部長會議。

Mr Tse Chin-wan, Secretary for Environment and Ecology (first left), accompanied by Mr Poon Kwok-ying, Raymond, Deputy Director/Regulatory Services of the EMSD (first right), attended the 13th APEC Energy Ministerial Meeting in August 2023.

機電署於2023年9月主辦第71屆國際纜車監管機構會議。 The EMSD hosted the 71st International Meeting of Technical Authorities for Cableways in September 2023. 多年來,機電署積極舉辦國際活動,推出註冊計劃以提升本 地工程人員的能力,並為署內工程人員提供全面的培訓和發 展機會。

為了加快本港提升能源效益的速度,機電署副署長/規管服務潘國英先生陪同環境及生態局局長謝展寰先生,出席於2023年8月在美國西雅圖舉行的第13屆亞太區經濟合作組織(亞太經合組織)能源部長會議,與各成員地區的能源部長建立溝通渠道,並分享本港的節能成果。機電署亦定期主辦和參與亞太經合組織能源效益及節能專家小組的會議和工作坊,以促進技術交流,務求引領香港實現淨零排放。

Over the years, the EMSD has been actively organising international events, launching registration schemes to enhance the competence of local engineering personnel, as well as providing comprehensive training and development opportunities for in-house engineering staff.

In order to accelerate the pace of energy efficiency enhancement in Hong Kong, Mr Tse Chin-wan, Secretary for Environment and Ecology, accompanied by Mr Poon Kwok-ying, Raymond, Deputy Director/Regulatory Services of the EMSD, attended the 13th Asia-Pacific Economic Cooperation (APEC) Energy Ministerial Meeting held in Seattle, the United States in August 2023, to establish connections with energy ministers of various member economies and share with them the energy saving results of Hong Kong. The EMSD also regularly hosts and participates in meetings and workshops of the APEC Expert Group on Energy Efficiency and Conservation to facilitate technical exchanges, with a view to leading Hong Kong to achieve net-zero emissions.



「家用冷氣機輕度易燃雪種處理工程人員自願註冊計劃」啟動禮 Launching Ceremony of the Voluntary Registration Scheme for Technicians Handling Mildly Flammable Refrigerant of Household Air-conditioners



2022年度傑出註冊電業 工程人員選舉特刊 A Special on the Outstanding Registered Electrical Worker

Awards Scheme 2022

機電署技術員訓練計劃「SPARK計劃」 SPARK Programme, the technician training scheme of the EMSD





香港管理專業協會最佳管理培訓及發展獎頒獎典禮2021
The presentation ceremony of Award for Excellence in
Training and Development 2021 organised by the Hong
Kong Management Association



學生參與「機電生力軍」 機電工程體驗計劃。 Students participated in the Experience Scheme for "New

Generation for E&M Services".

機電署吉祥物「機智啤啤」 Witty Bear, the EMSD's mascot



連繫社區 凝聚民心

Connecting with the Community to Foster Social Cohesion

機電署的技術員訓練計劃「SPARK計劃」榮獲香港管理專業協會頒發 2021 年最佳管理培訓及發展獎銀獎和 4 項特別獎,以表揚機電署為培育專業機電人員及提升市民生活質素所付出的努力。

此外,機電署舉辦「傑出註冊電業工程人員選舉」及「表現優異註冊電業承辦商比賽」兩項賽事,透過表揚出色的註冊電業工程人員和註冊電業承辦商,為業界樹立典範,從而提升業界從業員的專業水平,並鼓勵有志之士加入機電行業。

除了推動業界發展,機電署亦安排「機智啤啤」等吉祥物參與眾多公開活動及外展探訪,為部門與公眾的互動增添活力。 吉祥物形象可愛,深受學童歡迎。

為了增加與中學生的互動,機電署舉辦「啤啤校園之旅 —— 生活小智識」和「機電青少年大使計劃」,以生動活潑的方式讓學生了解機電業。有關活動不但可推廣機電安全、能源效益及日常科技應用,更可從小培養市民對機電行業的認識, 令行業發展生生不息。

The EMSD's technician training scheme, namely the SPARK Programme, received a silver award and 4 special awards in the Award for Excellence in Training and Development 2021 organised by the Hong Kong Management Association, in recognition of the EMSD's commitment to nurturing E&M professionals and improving the living quality of the public.

Moreover, the EMSD has organised the Outstanding Registered Electrical Worker Awards Scheme and Outstanding Registered Electrical Contractors Competition to commend outstanding registered electrical workers and registered electrical contractors, and set role models for the trade, thereby enhancing the professional standard of the trade practitioners and encouraging aspiring individuals to join the E&M industry.

Apart from driving industry development, the EMSD has deployed its mascots, such as the Witty Bear, in various public events and outreach visits to energise our engagement with the public. The mascots are especially popular among students due to their cute images.

To enhance interaction with secondary school students, the EMSD has launched the "Witty Bear Campus Tour — EMbrace Smart Living in Daily Life" and the E&M Young Ambassador Programme for students to learn about the E&M industry in lively and interesting ways. Such activities not only promote E&M safety, energy efficiency, and daily technological applications, but also cultivate public understanding of the industry from an early age and facilitate perpetual growth of the industry.





機電青少年大使計劃 E&M Young Ambassador Programme



「啤啤校園之旅 —— 生活小智識」 畢業典禮 Graduation ceremony of "Witty Bear Campus Tour — EMbrace Smart Living in Daily Life" 參加「啤啤校園之旅 — 生活小智識」 STEM教育先導計劃的同學向發展局常任秘書長(工務)劉俊傑先生(前排右二)和機電署署長彭耀雄先生(前排右一)介紹其團隊的

Students participating in the pilot STEM education programme, "Witty Bear Campus Tour — EMbrace Smart Living in Daily Life", introduced the creative work of their team to Mr Lau Chunkit, Ricky, Permanent Secretary for Development (Works) (second right, front row) and Mr Pang Yiu-hung, Director of Electrical and Mechanical Services (first right, front row).

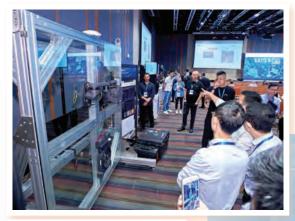




「Inno@E&M創新科技挑戰賽」 啟動禮 Kick off Ceremony of Inno@E&M Challenge

機電創科日 — 專題講座 E&M I&T Day – Seminar





機電創科日 一 方案展覽 E&M I&T Day – Solution Exhibition

「國際建築機電人工智能大挑戰」交流會 Sharing Session of Global AI Challenge for Building E&M Facilities





「綠色創科日」開幕典禮 Opening Ceremony of Green I&T Day

擁抱創科 領航奮進 Embracing Innovation: Pioneering the Way Forward

機電署深信創科是改進社會的重要助力,一直把創科發展和應用放在首位。自 2018 年起,本署每年都會舉辦「Inno@E&M 創新科技挑戰賽」,鼓勵員工提出創科項目構思,以優化部門運作。 2023 年的賽事吸引逾 160 份申請,晉身第二階段的隊伍會獲委任為創新小隊,並獲分配資源以實踐其創新方案。

每年由機電署主辦的「機電創科日」為客戶部門及業界提供平台, 以分享經驗和進行互動交流。為推廣建築機電行業的人工智能技 術,本署更與廣東省科學技術協會合辦「國際建築機電人工智能 大挑戰」。

透過綠色科技以實現可持續發展一直是機電署的重點工作。本署 與環境及生態局和廣東省科學技術協會合辦「綠色創科日」,匯 聚本地及內地的創科和機電業界人士,以及大學和公營機構的持 份者,以促進知識交流和分享利用創科減碳的經驗。

The EMSD firmly believes that embracing I&T is a significant driving force for societal improvement, and has always prioritised I&T development and application. Since 2018, the EMSD has organised the Inno@E&M Challenge every year to encourage our staff to propose I&T project ideas for optimising departmental operation. The Inno@E&M Challenge 2023 attracted more than 160 entries. The teams that entered the second stage of the competition will be appointed as innovation teams and allocated resources to implement their innovative solutions.

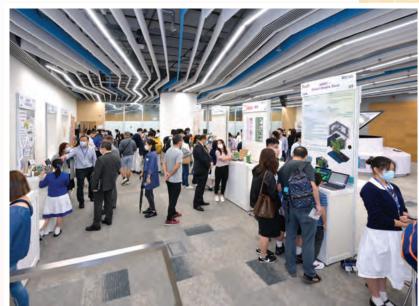
The annual E&M Innovation and Technology Day, organised by the EMSD, serves as a platform for client departments and the trade to share experience and engage in interactive exchanges. To promote the application of artificial intelligence (AI) technology in the building E&M industry, the EMSD, in collaboration with the Guangdong Association for Science and Technology, organised the Global AI Challenge for Building E&M Facilities.

Pursuing sustainable development through green technology has always been a key focus of the EMSD. To facilitate knowledge exchange and share the experience in utilising innovation and technology to reduce carbon emissions, the EMSD and the Environment and Ecology Bureau, together with the Guangdong Association for Science and Technology, jointly organised the Green Innovation and Technology Day, bringing together practitioners in the I&T and E&M trades, as well as stakeholders from universities and public bodies in both Hong Kong and the Mainland.



機電署主辦的「機電創科開放日」,向市民展示創新科技在機電服務和智慧城市發展方面的應用。開放日有不少為年青人而設的活動,以啟發他們對機電工程及科技的興趣。開放日更設有專區,讓年青人展示其「智在GWIN」物聯網機電應用挑戰賽的參賽作品。

The EMSD hosted the Inno@E&M Open Day to showcase I&T applications in E&M services and smart city development to the public. The Open Day featured a variety of activities for young people to inspire their interest in E&M engineering and technologies. The Open Day also had a special area for young people to display their entries in "Smart@GWIN" E&M IoT Application Challenge.



「智在GWIN」物聯網機電應用挑戰賽 一作品展示 "Smart@GWIN" E&M IoT Application Challenge – Entry Exhibition

位於機電署總部的機電創科專區展出多個互動展品,這些展品均為機電署與本港學術及科研機構的創科合作成果。機電創科廊則展出多個獲獎機電創科項目,並闡述有關項目為我們生活帶來的好處。

The E&M InnoZone located at our EMSD headquarters displays a number of interactive exhibits, which are the results of I&T collaboration between the EMSD and local academic and research institutions, whereas the E&M InnoFoyer displays an array of award-winning E&M-related I&T projects, and expounds on the benefits of the projects to our daily lives.



機電創科專區 E&M InnoZone





在機電創科專區向公眾講解機電創科項目。 Explaining E&M-related I&T projects to the public at E&M InnoZone.



在機電創科廊向時任政務司司長李家超先生 介紹日內瓦國際發明展得獎項目。

Introducing the award-winning projects at the International Exhibition of Inventions of Geneva to Mr Lee Ka-chiu, John, the then Chief Secretary for Administration, at E&M InnoFoyer.

機電創科網上平台啟動禮 E&M InnoPortal Launch Ceremony





機電創科網上平台 E&M InnoPortal

回原建築報電 人工智能大機取2022 Global Al Challenge in Mades Harming 2022 Autority Ceremony 10 5 19 78

機電署一直穩中求變,不遺餘力推動創科發展,以多個專用設施和平台促進科技應用和發展。 機電創科網上平台於 2018 年推出,羅列各政府部門、公營機構和機電業界的服務願望,並邀請 創科界提出相應的創科解決方案以作配對。

2022 年,機電署啟動機電人工智能實驗室合作項目,促進多方協作,以推動建築機電裝備的大數據和人工智能相關研發工作。本署舉辦的「國際建築機電人工智能大挑戰」旨在推展建築機電行業的人工智能技術,匯聚來自世界各地對建築機電人工智能應用具濃厚興趣的創新者。比賽由 40 多個國際組織擔任協辦和支持機構,吸引來自全球 10 個地區共 120 多支隊伍參加,反應熱烈。

Consistently dedicated itself to seeking changes while maintaining stability, the EMSD has spared no effort in driving I&T development and promoting the application and development of technology with multiple dedicated facilities and platforms.

Launched in 2018, the E&M InnoPortal lists service wishes of various government departments, public bodies and the E&M trade, and invites the I&T sector to propose corresponding solutions for matching.

In 2022, the EMSD initiated the collaboration project of E&M Al Lab to foster multilateral cooperation to advance research and development in big data and Al for building E&M equipment. The Global Al Challenge for Building E&M Facilities we organised was aimed at promoting Al technology in the building E&M industry, and has gathered innovators from around the world who have an enormous interest in Al application to building E&M facilities. More than 40 organisations around the globe supported the event as co-organisers and supporting organisations. The competition received an overwhelming global response of more than 120 teams from 10 geographical regions participating in the competition.





區域數碼監控中心 Regional Digital Control Centre



建築信息模擬 — 資產管理系統 Building Information Modelling – Asset Management (BIM-AM) system



壯大系統管理 迎接數碼挑戰

Embracing Digital Challenges with Robust System Management

社會瞬息萬變,科技日新月異,機電署因此加快數碼化的進程,大力發展各種技術和創新方案。當中,由機電署開發的建築信息模擬 — 資產管理系統,已在多個客戶部門和公營機構的場地和建築物,例如政府辦公室和醫院廣泛應用。

2020年2月,位於機電署總部大樓的區域數碼監控中心揭幕。該中心設施先進,配備中央儀表板,可實時監察機電設備的狀態和警報,以便本署人員遠程監控分散於全港不同地點的場地,及時作出維修提示及管理能源效益。系統亦透過數碼技術,以三維圖像顯示建築物外型及結構,便利維修和操作樓宇內的機電設施。

此外,本署善用多項創新技術為大龍獸醫化驗所更換製冷機,包括首次使用機電裝備合成法預製機電組件。通過運用機電裝備合成法技術,可縮短建築期,減低工程對客戶日常運作的影響。

In the rapidly evolving society, technology continues to advance at an unprecedented pace. The EMSD therefore has made tremendous efforts to expedite the progress of digital transformation by fostering the development of various technologies and innovative solutions. Among them, the Building Information Modelling – Asset Management (BIM-AM) system, developed by the EMSD, has been widely used in venues and buildings of various client departments and public bodies, such as government offices and hospitals.

In February 2020, the EMSD unveiled its state-of-the-art Regional Digital Control Centre located at its headquarters building. Equipped with an advanced centralised dashboard, the centre enables real-time monitoring of the status and alerts of E&M equipment. With the ability to remotely monitor multiple locations across the territory, the facility ensures timely maintenance recommendations and effective energy management. The system also utilises digital technologies to represent the exterior and structure of buildings in three-dimensional images, facilitating easier maintenance and operation of the E&M facilities within the buildings.

Moreover, the EMSD made good use of a number of innovative technologies to replace the chillers at Tai Lung Veterinary Laboratory, including prefabrication of E&M components with the use of MiMEP technology for the first time. With the application of MiMEP technology, the construction period could be shortened and the impact of the works on the clients' daily operation minimised.

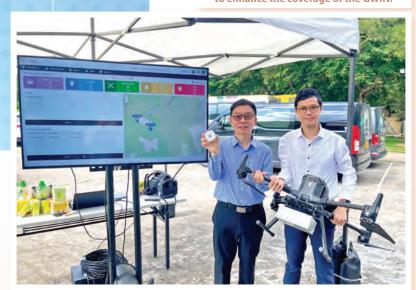
大龍獸醫化驗所製冷機組 The chiller plant of Tai Lung Veterinary Laboratory





利用搭載於無人機上的基站加強政府物聯通的覆蓋範圍。

Using the gateway mounted on the drone to enhance the coverage of the GWIN.





政府物聯通的防洪監測傳感器 Flood monitoring sensor of the GWIN





Providing a hiker safety system for the Orienteering Competition 2021, organised by Civil Aid Service (CAS), to enhance safety by tracking participants' location via the GWIN.





為支援機電設備數碼化,機電署於 2019 年啟用政府物聯通, 建立覆蓋全港各區的政府專用無線電傳感器網絡,以構建各 種智能應用,提升公共服務質素。

政府物聯通用途廣泛,包括改善建築物機電設備的保養和維修、管理公共設施的使用率、洪水監測,以及地下管道洩漏分析等。

To support the digitalisation of E&M equipment, the EMSD launched the Government-wide IoT Network (GWIN) in 2019, establishing a wireless sensor network that covers all the districts across Hong Kong and designated for the Government, in a bid to develop intelligent applications that enhance the quality of public services.

The GWIN has multi-functions, including improving the maintenance and repair of E&M systems in buildings, managing the utilisation of public facilities, monitoring floods, and analysing leaks in underground pipelines, etc.

在政府停車場的停車位安裝傳感器,向智能系統報 告車位的佔用情況,從而更有效地管理資源。

Installing occupancy sensors at parking slots in government car parks to report the occupancy status to a smart reservation system, enabling better resource management.



智能液化石油氣缸車檢測機械人 LPG Tank Inspection & Data Analysis with Intelligent Tanker Robot 應用於地下公共設施監察的 新型無線通訊系統

Novel Wireless Communication System for Underground Utility Monitoring

人工智能影像分析系統監察香港街市的自動梯運作 Al Video Analytics System for Escalator Monitoring in Wet Markets of Hong Kong



機電署推行智慧城市解決方案,協助各政府部門提升公共服務和營運效率。多個由機電署促成的重點創新項目,包括智能液化石油氣缸車檢測機械人、人工智能影像分析系統、應用於地下公共設施監察的新型無線通訊系統及鼠患管理系統等,大大改善公共服務的質素。此外,本署以多項創科方案支援抗疫工作,確保政府在疫情期間運作如常。

Thanks to the smart city solutions implemented by the EMSD, the public services and operational efficiency of various government departments have been enhanced. A number of key innovative projects facilitated by the EMSD, including the LPG Tank Inspection & Data Analysis with Intelligent Tanker Robot, Al Video Analytics System, Novel Wireless Communication System for Underground Utility Monitoring and Rodent Control Management System, have greatly improved the quality of public services. Furthermore, we supported the anti-epidemic efforts with a multitude of I&T solutions, ensuring the normal operation of the Government during the epidemic.





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升降機及自動梯數碼工作日誌 Digital Logbooks for Lifts

多年來,機電署與各創科界策略夥伴合作,研發多個創科項目,成效顯著。 舉例而言,升降機及自動梯數碼工作日誌系統提高了升降機及自動梯的保 養及維修效率;智慧廁所及智能馬桶清潔系統則協助改善公共洗手間的衞 生情況。這些項目肯定了本署在推動創科發展方面的努力和成果。

Over the years, the EMSD has collaborated with various strategic partners in the I&T sector to develop various innovative projects. These initiatives have yielded remarkable results, such as the system of Digital Logbooks for Lifts and Escalators, which has enhanced the maintenance and repair efficiency of lift and escalators; as well as the Smart Toilet and Smart Toilet Bowl Cleaning System, which has helped improve the hygiene of public toilets. These projects have recognised the EMSD's efforts and achievements in fostering I&T advancement.

智慧廁所 Smart Toilet





智能馬桶清潔系統 Smart Toilet Bowl Cleaning System





由 2018 年至今,機電署已經與 15 家本地和 5 家內地創科合作夥伴簽署多項合作備忘錄,積極推動本地和內地持份者和業界通力合作,共同開發創科新領域。機電署更榮獲超過 30 張專利證明書。

Since 2018 till now, the EMSD has signed various memoranda of co-operation with 15 local and 5 Mainland l&T partners, actively promoting collaboration among stakeholders and industries in both Hong Kong and the Mainland to jointly advance new frontiers in l&T. The EMSD has also obtained more than 30 patent certificates.

《建築機電系統綠色智慧技術及 人工智能標準合作備忘錄》簽署儀式

Signing Ceremony of Memorandum of Co-operation on Green Intelligent Technology and Artificial Intelligence Standards for E&M Systems of Buildings

《粵港創新及科技協作合作備忘錄》簽署儀式 Signing Ceremony of Memorandum of Co-operation on Innovation and Technology Collaboration





機電創科日2022暨合作備忘錄簽署儀式 E&M I&T Day 2022 cum Signing Ceremony of Memorandum of Co-operation



司機隨身寶 Smart Driver Assistant for Automated People Mover



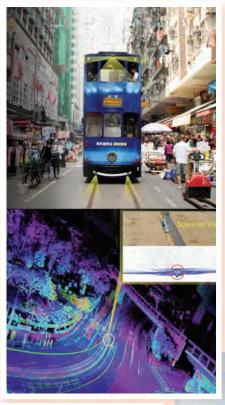
智能防污海水濾網 Smart Antifouling Seawater Screen

智能升降機移動 監測裝置 Intelligent Lift Movement Surveillance Device



智能鍋爐維護機械人 Smart Boiler Servicing Robot





預防電車脱軌及碰撞系統 Tramway Derailment and Collison Prevention System



蜚聲國際 勇奪佳績

Renowned for International Acclaims: Achieving Outstanding Results

近年,機電署牽頭的多個創科項目屢獲國際殊榮,足證我們在推動創科方面的努力備 受肯定。

過去數年,機電署在日內瓦國際發明展中取得佳績,榮獲共 50 個獎項,包括 1 項特別獎、12 項金獎、24 項銀獎和 13 項銅獎。

In recent years, several I&T projects spearheaded by the EMSD have gained numerous international accolades in recognition of our dedication to promoting I&T.

Over the past few years, the EMSD has achieved remarkable success at the International Exhibition of Inventions of Geneva, receiving a total of 50 awards, including 1 Special Award, 12 Gold, 24 Silver and 13 Bronze medals.





2021建造業議會數碼化大獎 CIC Construction Digitalisation Award 2021



2022建築信息模擬成就嘉許禮 (由發展局和建造業議會合辦) Celebration of BIM Achievement 2022 (Co-organised by the Development Bureau and the Construction Industry Council)

機電署亦在不同創科獎項計劃中勇奪多項殊榮,相關計劃包括 2021 建造業議會數碼化大獎、2021 香港資訊及通訊科技獎、2022 建築信息模擬成就嘉許禮、2022 年公務員優質服務獎勵計劃、全球及香港最具創新力知識型機構大獎、第21 屆亞太資訊及通訊科技大獎等。得獎是對機電署堅持不懈推動創科的認同,與此同時也激勵本署更堅定地走在創科的最前線,推動研發新技術,並鼓勵業界廣泛應用創科,造福全港市民。

The EMSD has also achieved scores of accolades in various I&T award schemes, including the CIC Construction Digitalisation Award 2021, the Hong Kong ICT Awards 2021, the Celebration of BIM Achievement 2022, the Civil Service Outstanding Service Award Scheme 2022, the Global and Hong Kong Most Innovative Knowledge Enterprise Awards, and the 21st Asia Pacific Information and Communications Technology Alliance Awards. Not only are these awards testament to our unwavering efforts to drive I&T, they also inspire us to strive to stay at the forefront of I&T to promote research and development of innovative technologies and encourage broader application of I&T in the industry, ultimately benefiting all the people across the territory.



全球及香港最具創新力知識型機構大獎 Global and Hong Kong Most Innovative Knowledge Enterprise Awards 2022年公務員優質服務獎勵計劃 Civil Service Outstanding Service Award Scheme 2022

第21屆亞太資訊及通訊科技大獎 The 21st Asia Pacific Information and Communications Technology Alliance Awards





2021香港資訊及通訊科技獎 Hong Kong ICT Awards 2021





機電署成立75年以來,一直緊守崗位,即使面對突如其來的社會狀況,仍然心繫社區,本 着關愛和同理心,堅守對大眾的承諾,與市民攜手同行。

Established for 75 years, the EMSD has always been steadfast in carrying out its duties. Even in the face of unexpected social circumstances, we remain concerned about the community. With care and empathy, we uphold our commitment to the community and walk hand in hand with them.

竭力為民 同心抗疫

Serving the Community with Dedication: Fighting the Epidemic Together

2020年年初,政府急需增建檢疫設施,用作收容確診個案的緊密接觸者,以切斷病毒的 社區傳播鏈。在醫務衞生局(前稱食物及衞生局)的統籌下,超過20個政策局和部門包括 機電署齊心合力,一同策劃、興建、使用和管理新的檢疫設施。在短短10個月內,政府 興建了4000多個檢疫單位,當中包括大家熟悉的竹篙灣第一至四期設施,大大提升香港 防疫和抗疫的能力。

儘管前路挑戰重重,但機電署同仁堅毅不拔,迎難而上。2020年8月,鑑於負壓隔離設施需求殷切,中央政府大力支持香港在赤鱲角建造一所臨時醫院(現名為北大嶼山醫院香港感染控制中心)。機電署就院內機電系統的設計、安裝、測試、運作和維修保養等多個方面提供技術支援。

全賴各方通力合作,北大嶼山醫院香港感染控制中心終於在2021年1月圓滿竣工,成為香港首間所有病房均配備隔離治療設施的醫院。中心啟用後,機電署的團隊繼續為中心提供全天候的技術支援,確保其機電系統運作暢順。

In early 2020, the Government urgently needed to construct quarantine facilities to accommodate close contacts of confirmed COVID-19 patients to help sever transmission chains of the virus in the community. Under the coordination of the Health Bureau (formerly the Food and Health Bureau), more than 20 government bureaux and departments, including the EMSD, joined hands to plan, construct, utilise and manage the new quarantine facilities. More than 4 000 quarantine units were constructed in 10 months, including the most well-known ones in Phase I to IV of Penny's Bay, strengthening Hong Kong's capability to prevent and fight against the epidemic.

The EMSD remained resilient and committed despite all the challenges ahead. In August 2020, in view of the pressing demand for negative pressure isolation facilities, the Central Government provided staunch support for Hong Kong to construct a temporary hospital (now named as North Lantau Hospital Hong Kong Infection Control Centre (HKICC)) in Chek Lap Kok. The EMSD played a crucial role in providing technical support in the design, installation, testing, operation and maintenance of E&M systems in the temporary hospital.

Thanks to the concerted effort of various stakeholders, the HKICC was completed in January 2021, becoming the first hospital in Hong Kong equipped with isolation treatment facilities in all wards. Following the commissioning of the HKICC, the EMSD team continued to provide round-the-clock technical support for the HKICC, ensuring the seamless operation of its E&M systems.



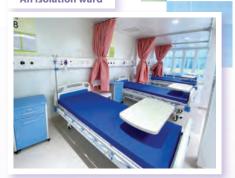
我們參與「同心築」項目, 支援興建檢疫設施的工作以應急需。

We participated in the project "Together We Build", providing support for the construction of quarantine facilities to meet the urgent needs.

北大嶼山醫院香港感染控制中心 North Lantau Hospital Hong Kong Infection Control Centre



隔離病房 An isolation ward





檢查檢疫設施的通風系統。
Inspecting the ventilation system of guarantine facilities.



機電署團隊為北大嶼山醫院香港感染控制中心提供機電技術支援。
The EMSD team provided technical support for the E&M systems serving the HKICC.

為把郵輪碼頭改建為檢疫中心提供支援。
Providing support for the conversion of the cruise terminal into a quarantine centre.





匯報改裝駿洋邨為檢疫中心的 進展。

Reporting the progress of converting Chun Yeung Estate into a quarantine centre.



During the anti-epidemic fight, the EMSD rendered prompt support to various government departments by providing efficient and high-quality technical services for the conversion of government venues, such as a cruise terminal, holiday villages and Chun Yeung Estate, into quarantine centres, as well as maintenance services for the E&M equipment at the quarantine centres.



檢查駿洋邨檢疫中心 的機電設備。

Inspecting the E&M facilities in the Chun Yeung Estate quarantine centre.

流動組合式 - 高效能 空氣微粒子過濾器 Mobile Modular High Efficiency Particulate Air Filter Units





體育館改建為檢疫中心。 A sport centre converted into quarantine centre.

在疫情期間,政府把部分體育館改建為臨時氣膜實驗室、檢疫中心和暫託中心。為了在短時間內啟用所需的隔離設施以應付日益增加的抗疫需要,機電署設計、建造和安裝了數百部「流動組合式-高效能空氣微粒子過濾器」,迅速把普通病房改裝為負壓病房。

During the outbreak of the epidemic, the Government converted some sports centres into temporary air-inflated laboratories, quarantine centres and holding centres. In order to put the necessary isolation facilities into operation within a short period of time to meet the increasing anti-epidemic demand, the EMSD designed, constructed and installed hundreds of Mobile Modular High Efficiency Particulate Air Filter Units, facilitating the rapid conversion of general wards into negative pressure wards.



設於馬鞍山體育館的 臨時氣膜實驗室 The temporary air-inflated laboratory at Ma On Shan Sports Centre

檢查體溫監測系統。 Inspecting the body temperature monitoring system.



2022 年,機電署聯同社會福利署和屋宇署,在 3 個月內走訪 700 多間安老及殘疾人士院舍,檢 查各處所的通風情況,並因應需要提供改善建 議。機電署亦為衞生署到食肆及參與指定檢疫 酒店計劃的酒店進行通風評估,並提供通風裝 置的技術建議,確保有關處所通風水平良好, 符合感染控制的要求。

In 2022, the EMSD, in collaboration with the Social Welfare Department and the Buildings Department, visited more than 700 residential care homes for the elderly and persons with disabilities within 3 months to inspect the ventilation in the premises and recommended improvements where necessary. The EMSD also served the Department of Health (DH) in conducting ventilation assessment for restaurants and hotels under the Designated Quarantine Hotel Scheme; and providing technical advice on ventilation settings to ensure that such premises have a good level of ventilation and comply with the infection control requirements.





機電署團隊聯同政府專家顧問袁國勇教授為 安老及殘疾人士院舍進行通風評估。

The EMSD team and Professor Yuen Kwok-yung, the Government's expert advisor, are conducting ventilation assessment for residential care homes for the elderly and persons with disabilities.

評估食肆的通風效能。 Assessing the ventilation performance in a restaurant.





評估指定檢疫酒店的通風效能。 Assessing the ventilation performance of the designated quarantine hotels.







網上註冊申請服務 Online registration application services

疫情高峰期間,跨境貨車運輸受阻,機電署支援政府緊急重啟跨境鐵路貨運服務的計劃,全程監察和督導所有事前準備的必要程序,確保鐵路安全。

此外,有鑑於市民和業界人士受疫情影響而未能如常親身辦理註冊申請,機電署迅速提升網上註冊申請服務,讓有關人士可透過電子方式提交申請、繳費和領取註冊證明書。

During the peak of the epidemic, cross-boundary goods vehicle transport was disrupted. To support the Government's initiative to urgently resume cross-boundary rail freight services, the EMSD monitored and supervised all necessary procedures throughout the preparation to ensure railway safety.

In addition, in view of the fact that members of the public and the trade were unable to apply for registration in person as usual due to the epidemic, the EMSD swiftly enhanced its online registration application services, enabling the persons concerned to submit applications, make payment and collect their registration certificates digitally.



為恢復跨境鐵路貨運服務進行安全巡查。
Conducting safety inspection for the resumption of cross-boundary rail freight services.



更換醫院的 空氣過濾網。 Replacing air filters in a hospital.



升降機免觸式按鈕 Touchless lift buttons



紫外線消毒系統 UV disinfection system

安裝在自動梯上的紫外線消毒裝置 UV disinfection devices installed on escalators



在抗疫工作中,機電署為醫院管理局和衞生署轄下 40 多間公立醫院和逾百間診所提供服務,更優先為隔離病房、監察病房、指定診所和急症室等高風險地方的空調和通風系統,以及其他機電設備進行系統評估和加強保養,使醫護人員和病人能在安全的環境中工作和接受治療。

為了進一步減低疫情傳播風險並確保政府能如常運作,機電署與不同政府部門合作,在人流密集的政府場地安裝多項防疫設施,包括升降機免觸式按鈕和紫外線消毒裝置等,與各部門同心抗疫。

In the fight against the epidemic, the EMSD provided services to more than 40 public hospitals and over a hundred of clinics under the Hospital Authority (HA) and the DH. We took a step further to prioritise system assessment and strengthen the maintenance of air-conditioning and ventilation systems as well as other E&M equipment in high-risk areas such as isolation wards, surveillance wards, designated clinics and Accident and Emergency Departments, so as to ensure that medical staff are working and patients are receiving treatment in a safe environment.

To further minimise the risks of spreading the epidemic and ensure normal operation of the Government, the EMSD collaborated with various government departments to install anti-epidemic facilities, including touchless lift buttons, ultraviolet (UV) disinfection devices, etc., in government venues with high patronage to stand together with the departments in the battle against the epidemic.



安裝和優化口罩製造機。 Installing and enhancing mask-making machines.

為支援「疫苗到戶接種服務」改裝車輛。 Conducting vehicle modification in support of the Home Vaccination Service.





檢查流動採樣站。 Inspecting a mobile specimen collection station.



機電署在不同層面為政府的抗疫工作提供專業技術支援,包括為羅湖 懲教所和赤柱監獄安裝和優化口罩製造機;為社區檢測中心所有設備 和設施以及政府車輛的空調系統進行消毒;為支援「疫苗到戶接種服 務」改裝車輛等。

The EMSD provided professional technical support for the Government's anti-epidemic work at various levels, including installing and enhancing mask-making machines at Lo Wu Correctional Institution and Stanley Prison, disinfecting all equipment and facilities at community testing centres as well as the air-conditioning systems on government vehicles, conducting vehicle modification in support of the Home Vaccination Service, etc.



派發抗疫物資。 Distributing anti-epidemic supplies.



支援社區疫苗接種中心的運作。
Supporting the operation of community vaccination centres.



機電署全體人員也隨時候命,為「圍封強檢」行動和強制檢測公告執法行動,以及社區疫苗接種中心的運作提供支援,致力與各部門攜手抗疫,協助市民回復正常生活。

All EMSD staff were always ready to provide support for the "restriction-testing declaration" operations and enforcement actions on compulsory testing notices, as well as the operation of community vaccination centres, with a commitment to combating the epidemic in concerted effort with various departments and assisting the public to resume their normal lives.









為受破壞的設施進行修復工程。 Repairing damaged facilities.





緊急應變小隊修復受破壞的交通燈。 The emergency team is repairing a damaged traffic light.

跨部門合作 齊加速復常

Collaboration between Departments to Accelerate Operation Recovery

2019年的社會動盪造成海底隧道(紅隧)和多個地區的交通燈嚴重損壞。機電署組成 24 小時緊急應變小組,與其他部門緊密合作,清除紅隧的障礙物及修補受破壞設施。經各方全力趕工清理現場後,紅隧最終在 100 小時內恢復正常運作。

在同一時期,立法會綜合大樓亦遭受嚴重破壞。機電署為其設施進行修復工程,協助立法會盡快恢復運作。

In 2019, the social unrest caused severe damage to the Cross-Harbour Tunnel (CHT) and traffic lights in different areas. The EMSD formed a 24-hour dedicated emergency team that worked closely with various government departments to remove obstacles in the CHT and repair the damaged facilities. The CHT eventually resumed normal operation within 100 hours after all parties worked hard to clean up the site.

During the same period, the Legislative Council Complex also suffered significant damage. The EMSD carried out repair works promptly to expedite the restoration of the Legislative Council's operation.







修復政府大樓受損毀的機電設施。 Repairing damaged E&M facilities of a government building.

臨危變陣 應急解困 Adapting Promptly to Challenging Times

機電署亦在其他緊急事故中走在最前線,為社區提供不可或缺的支援。本署與其他政府部門、受規管機構和機電業界一直緊密合作,定期檢討緊急應變計劃和運作部署,以確保香港的公共機電設施不間斷地安全運作。機電設施倘若受損,機電署的緊急事故控制中心會全天候與相關政府部門緊密聯繫,以盡快修復相關設施。例如,在 2018 年的超強颱風山竹襲港、2023 年的超強颱風蘇拉肆虐和隨後的世紀暴雨過後,全港多個地方的機電設施都遭受嚴重破壞和干擾。機電署面對不同的惡劣情況,仍能有效執行緊急應變措施,迅速調動資源及完成相關修復工作。

The EMSD has consistently been at the forefront of responding to various emergencies, providing indispensable support to the community. In close collaboration with other government departments, regulatees and the E&M trade, the EMSD regularly reviews emergency contingency plans and operational deployment to ensure uninterrupted and safe operation of public E&M facilities in Hong Kong. In the event of damage to E&M facilities, the EMSD's Emergency Control Centre closely liaises with relevant government departments around the clock to facilitate prompt repair. For instance, in the aftermath of the Super Typhoon Mangkhut in 2018, the Super Typhoon Saola in 2023 and subsequent severe rainstorms, numerous E&M facilities across multiple locations in Hong Kong suffered extensive damage and disruption. In the face of different adverse situations, the EMSD was still capable of effectively implementing emergency response measures, swiftly mobilising its resources and completing relevant repair works.

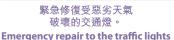


The boarding gangways at a pier were severely damaged in adverse weather.



在惡劣天氣前為政府大樓的電掣房 安裝臨時擋水板及抽水泵。

Installing temporary flood gates and water pumps for the switch room of a government building before adverse weather.



damaged in adverse weather.







作為香港的政府部門,維持不同公共設備正常運作,確保市民生活暢行無礙,實為機電署一大關鍵職能。近年大型基建相繼落成,機電署致力參與其中建設,利用科技福澤民生。

As a government department in Hong Kong, maintaining the normal operation of various public facilities and ensuring the smooth and quality lives of citizens is indeed a key function of the EMSD. In recent years, the EMSD has been committed to participating in large-scale infrastructure projects, which were completed successively, and making use of technology to benefit people's living.

優化基建 智能升級 Optimising Infrastructure with Intelligent Upgrades

2020 年,香園圍邊境管制站正式啟用。該設施強化了內地及香港的連繫,並促進香港與深圳、粵東地區及鄰近省份的合作和發展。機電署參與了這項重要的大型建設項目,管理超過 50 項工程。

為提升營運效率,機電署引進多種先進的設備,包括「門架式」車輛 X 光檢查系統、備有超過 600 支鏡頭的閉路電視系統、體溫探測系統、車輛自動清關支援系統、流動 X 光車輛掃描系統及高科技毒品分析儀等。此外,機電署負責保養旅檢大樓內的機電設施、空調設施和升降機等。

The Heung Yuen Wai Boundary Control Point officially started operation in 2020. It strengthens the connection between the Mainland and Hong Kong, and promotes the cooperation between and development of Hong Kong, Shenzhen, the eastern regions of Guangdong and neighbouring provinces. The EMSD was involved in this important large-scale construction initiative, overseeing more than 50 engineering projects.

To enhance the operational efficiency, the EMSD has introduced various advanced equipment, such as gantry-type vehicle X-ray inspection systems, a closed-circuit television system with over 600 cameras, temperature detection systems, automatic vehicle clearance support systems, mobile X-ray vehicle scanning systems, and high-tech drug analysis instruments. Additionally, the EMSD is responsible for the maintenance of E&M facilities, air-conditioning facilities and lifts in the Passenger Terminal Building.

支援邊境管制站 機電設施的機電 署團隊 The EMSD team providing support for the E&M facilities at boundary

control points





香園圍邊境管制站 一 旅檢大樓 Passenger Terminal Building, Heung Yuen Wai Boundary Control Point







引進「門架式」車輛X光檢查系統。 Introducing the gantry-type vehicle X-ray inspection system.



創科領航 建設智慧都市 Leading the Way to Building a Smart City with Innovation

機電署參與《香港智慧城市藍圖 2.0》中「智慧出行」的發展,以創新方案大大便利道路使用者。

本署為隧道設施提供技術支援,協助引入「易通行」不停車繳費系統,讓駕駛者在通過收費廣場時不再需要停車繳費。

此外,機電署協助運輸署安裝及測試的新一代停車收費錶系統。新系統除支援多種付費方式外,亦配備泊車位佔用傳感器,提供可用泊車位的實時資訊。

The EMSD is involved in the development of Smart Mobility under the Smart City Blueprint for Hong Kong 2.0, providing much greater convenience to road users with innovative solutions.

The EMSD provides technical support for tunnel facilities, and assists in introducing the HKeToll, a non-stop electronic toll collection system, so that drivers no longer need to stop and make payments when passing the toll plaza.

Moreover, the EMSD installed and tested a new generation of parking meter system for the Transport Department. Apart from supporting multiple payment methods, the new system is also equipped with occupancy sensors to provide real-time information about the availability of parking spaces.

易通行 HKeToll



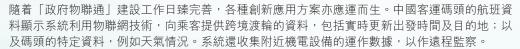


利用物聯網技術向乘客提供跨境渡輪的 實時資料。

Leveraging IoT technologies to provide passengers with real-time information on cross-border ferries.

為農曆年宵市場提供技術支援。
Providing technical support
for the Lunar New Year Fair.

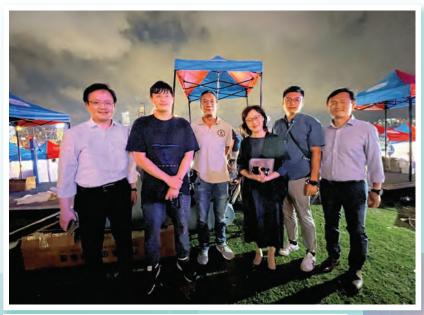




機電署也經常為各種社區大型活動準備場地設施,並為各類機電設備提供技術支援,例如農曆年宵市場及「香港夜繽紛」等。

As the construction of the GWIN progresses, various innovative applications have also emerged. The Sailing Information Display System at the China Ferry Terminal leverages IoT technologies to provide passengers with information on cross-border ferries, including real-time updates of departure times and destinations, as well as specific information about the terminal, such as weather conditions. The system also collects operation data of nearby E&M equipment for remote monitoring.

Additionally, the EMSD often prepares venue facilities for various large-scale community events, and provides technical support for various E&M equipment therein, such as the Lunar New Year Fair and the Night Vibes Hong Kong, etc.



為「香港夜繽紛」提供技術支援。 Providing technical support for the Night Vibes Hong Kong.

檢查鐵路機電設施。 Inspecting railway E&M facilities.





優化運輸基建 Optimising Transportation Infrastructure

跨境及本地鐵路運輸毫無疑問便利全港市民的生活。多個劃時代的鐵路項目近年相繼完成,包括於 2018 年 9 月通車的高速鐵路(香港段)、2021 年 6 月全面通車的屯馬線及 2022 年 5 月通車的東鐵綫過海段。機電署在各鐵路項目的建造和測試過程中扮演重要的監督角色,確保鐵路運作安全。

The cross-border and local railway transport undoubtedly facilitates the lives of all Hong Kong citizens. Several epoch-making railway projects have been completed in recent years, including the opening of the High Speed Rail (Hong Kong Section) in September 2018, the full commissioning of the Tuen Ma Line in June 2021, and the opening of the East Rail Line Cross-harbour Extension in May 2022. The EMSD played an important supervisory role in the construction and testing processes of various railway projects to ensure safe operation of the railways.



監督鐵路項目的建造和測試, 確保鐵路運作安全。

Monitoring the construction and testing of a railway project to ensure safe operation of the railways.



高速鐵路 (香港段) 石崗列車停放處 Shek Kong Stabling Sidings of High Speed Rail (Hong Kong Section)

巡查運作中的車站。 Inspecting operating stations.



巡查山頂纜車軌道。 Inspecting the track of the Peak Tram.





進行山頂纜車的安全測試。 Conducting safety test of the Peak Tram.

全新山頂纜車 The brand new Peak Tram



監督山頂纜車的優化工程。 Monitoring the enhancement works of the Peak Tram.



山頂纜車自 1888 年啟用,是全球歷史最悠久的纜車建設之一,近期進行更換拖曳系統、控制系統、纜索和路軌等優化工程後,現已更新至第六代新款纜車。為了減低系統更新期間對市民所造成不便,機電署於疫情期間持續監察優化工程,不僅監督所有關鍵測試,亦就一些設計細節給予意見,例如建議波浪型地板的改良設計,務求讓站立的乘客在不同斜度的路段都能保持平衡,帶給本地乘客和遊客更安全及難忘的體驗。

The Peak Tram, inaugurated in 1888, holds the distinction of being the one of the world's oldest cable car systems. After undergoing the recent enhancement project that involved replacement of the haulage system, control system, cables and track, it has been upgraded to its sixthgeneration design. To minimise inconvenience caused to the public during the upgrading, the EMSD continually monitored the enhancement works during the epidemic. In addition to monitoring critical tests, we also provided feedback on certain design details. For instance, we suggested improvements to the wave-patterned flooring design, so as to ensure that standing passengers could maintain balance at different inclines, and local commuters and tourists would enjoy a safer and more memorable experience.



節能減排 爭碳中和

Energy Saving and Emission Reduction: Striving Towards Carbon Neutrality

為了實現碳中和,機電署一直支持節約能源,並透過強制性能源效益標籤計劃,為多種常用的家用電氣及氣體產品設定節能標準。該計劃的第四階段於 2023 年 9 月生效,涵蓋範圍已擴展至發光二極管 (LED) 燈、氣體煮食爐,以及即熱式氣體熱水爐。預計第四階段實施後,每年可節省約 1.6 億度電,相當於每年減少約 75 000 公噸碳排放。計及首三階段的 8 類訂明產品,強制性標籤計劃第四階段所涵蓋的住宅總能源消耗量將由約五成大幅增至約八成。

此外,《建築物能源效益條例》(第610章)於2012年全面實施後,機電署於同年發布了兩本實務守則, 旨在提升建築物的能源表現。

本署每三年更新守則一次。預計明年會推出新版本,進一步全面提升能源效益標準。同時,本署亦會檢視相關技術及國際認可的能源效益標準的最新發展,務求與時並進。

To achieve carbon neutrality, the EMSD has consistently supported energy conservation. Through the Mandatory Energy Efficiency Labelling Scheme (MEELS), energy-saving standards are established for a variety of commonly used household electrical and gas products. The fourth phase of the MEELS took effect in September 2023 and its scope has been extended to LED lamps, gas cookers and instant gas water heaters. It is estimated that the implementation of this phase will save approximately 160 million kilowatt-hours of electricity per year, equivalent to an annual reduction of around 75 000 metric tons of carbon emissions. Taking into account the 8 categories of products covered in the first three phases, the total residential energy consumption covered by the fourth phase of the Mandatory Labelling Scheme will increase significantly from approximately 50% to about 80%.

Furthermore, after the full implementation of Buildings Energy Efficiency Ordinance (Cap. 610) in 2012, the EMSD issued two practical guidelines in the same year, with the aim of enhancing the energy performance of buildings.

The guidelines are updated once every three years. The upcoming version, expected to be released next year, will further enhance the energy efficiency standards comprehensively. At the same time, the latest developments in relevant technologies and internationally recognised energy efficiency standards will be reviewed, in order to keep pace with the progress of the industry.



第四階段強制性能源效益標籤計劃 The fourth phase of the Mandatory Energy Efficiency Labelling Scheme 根據《建築物能源效益條例》 (第610章)推出的《建築物 能源審核實務守則》及《屋宇 裝備裝置能源效益實務守則》

The Code of Practice for Building Energy Audit and Code of Practice for Energy Efficiency of Building Services Installation promulgated pursuant to the Buildings Energy Efficiency Ordinance (Cap. 610)







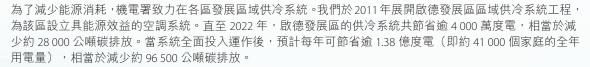
區域供冷機房 The chiller plant room of the district cooling system



啟德發展區區域供冷 系統(北廠) District Cooling System (North Plant) in the Kai Tak Development Area

电系統 Solar power generation systems installed for a school

為學校安裝太陽能發



另外,機電署積極研究零碳能源。在 2019 年,我們推出「採電學社」,為學校和非政府福利機構安裝太陽能發電系統。機電署亦致力推廣潔淨燃料,全力支持興建海上液化天然氣接收站,並積極為有關氫能的立法工作準備,務求提升能源效益。

To reduce energy consumption, the EMSD has been committed to developing district cooling systems in various areas. In 2011, we initiated the district cooling system project in the Kai Tak Development Area, establishing an energy-efficient air conditioning system for the region. As at 2022, the cooling system in the Kai Tak Development Area has saved over 40 million kilowatt-hours of electricity, equivalent to a reduction of approximately 28 000 metric tons of carbon emissions. Once the system is fully put into operation, it is estimated that it can annually save over 138 million kilowatt-hours of electricity (i.e. the annual electricity consumption of approximately 41 000 households), equivalent to a reduction of approximately 96 500 metric tons of carbon emissions.

In addition, the EMSD actively conducts researches on zero-carbon energy. In 2019, we launched the "Solar Harvest" program, through which solar power systems were installed for schools and non-governmental welfare organisations. The EMSD is also dedicated to promoting clean fuels, by fully supporting the construction of the offshore liquefied natural gas terminal and paving the way for the introduction of hydrogen energy legislation, in order to enhance energy efficiency.

海上液化天然氣接收站 Offshore liquefied natural gas terminal





參觀氫燃料電池巴士。 Checking out a hydrogen fuel cell bus.



實地考察加氫站。 A field trip to a hydrogen refuelling station.

Co-create a Sustainable FUTURE

優美的生活環境是香港發展的一個重要元素,為建設香港成為一個宜居及可持續發展的綠色城市,機電署會延續「傳承創新同心惠民」的精神,繼續與市民攜手向碳中和邁進,為下一代的美好生活環境作出貢獻。

A beautiful living environment is an important element in the development of Hong Kong. In order to develop Hong Kong as a livable and sustainable green city, the EMSD will continue the spirit of "Serving the Community with Heart and Innovation" and connect with the public to work together towards carbon neutrality, contributing to a better living environment for future generations.



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