

本年報以英文字 "re-" 及「再」字為設計主題,展示生產力局在第四次產業革命的大浪潮下,透過推動高增值生產及智能科技,促進香港的「再工業化」,在經濟、環境及社會三方面實現可持續發展。

The prefix "re-" and its Chinese equivalent " 再 ", form the design theme of this Report which features how HKPC facilitates "re-industrialization" in Hong Kong. Banking on the advent of the fourth industrial revolution, HKPC spearheads high value-added production and smart technologies to achieve sustainability in economic, environmental and social terms.



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Operation Highlights

Total service income

HK\$437 million

整體服務收入

- 生產力局及其附屬公司的整體服務收入達 4.37 億元,較 2014/15 年度增長 9.3% Total service income of HKPC and its subsidiaries amounted to HK\$437 million, representing an increase of 9.3% over that of 2014/15.
- 推行 917 個顧問項目,38 個新研發項目 Undertook 917 consultancy projects, 38 new R&D projects.



- 與 Asprova Corporation 及 Epicor Software Corporation 簽訂合作協議,推動本地業界應用智能製造管理方案。 Signed collaboration agreements with two leading technology firms in Industry 4.0 solutions, Asprova Corporation and Epicor Software Corporation, to promote adoption of smart production management in local industry.
- 與香港科技園公司合作推出「Lab Test One」的網上資訊平 台及利用流動應用程式,一次過掌握生產力局、科技園公 司、大學、研發中心和政府轄下37所實驗室的先進檢測設 施及服務資料。

Launched the Lab Test One online platform and mobile application with the Hong Kong Science and Technology Parks Corporation (HKSTPC) to provide one-stop access to the resources of 37 laboratories and testing facilities at HKPC, HKSTPC, local universities, research centres and the Government.





客戶服務滿意度調查得分: (10 分為滿分)

Customer Satisfaction Survey Score:

(on a scale of 10)



₽嶄新產業支援平台 **New Industry Support Platforms**

- 2015 年 8 月設立提供一條龍 3D 打印顧問服務的支援中心 「3D 打印體驗廊」,助 工商企業應用 3D 打印技術發展創新產品及服務。 Established a new one-stop support centre - "3D Printing One", in August 2015 to enable enterprises make use of 3D printing to develop innovative products and services.
- 2015年11月成立「智能機器人中心」,提供一站式應用技術支援,助業界提升生產效率。 Opened a one-stop robotics application support centre – "RoboticsOne" in November 2015 to help enterprises lift efficiency and competitiveness.
- 2016年2月推出「中小企好幫手」流動應用程式,網羅13間機構 30 多個資助計劃,讓中小企隨時隨地掌握切合業務需 要的資助計劃詳情。

Launched the user-friendly "SME Biz Easy" mobile application in February 2016 to give SMEs quick access to information on over 30 funding schemes from 13 organizations, helping SMEs identify funding schemes that suit their business needs.









• 生產力局承辦由民政事務局和中國載人 航天工程辦公室合辦的「香港中學生 太空搭載實驗方案設計比賽」和頒獎 典禮,得獎方案將由生產力局協助製 成適合在太空操作的實驗品。 Acting as the implementation agent of the Space Science Experiment Design Competition co-organized by the Home Affairs Bureau and the China Manned Space Agency, HKPC organized the award presentation ceremony and helped to construct the three winning designs into models feasible for conducting experiments in space.



獎項殊榮 Awards and Honours

- 與香港紡織及成衣研發中心合作項目在第 43 屆「日內瓦國際發明展」獲兩項金獎:「低成本可降解纖維」獲評審團特別嘉許金獎,「等離子毛衣功能性處理」獲金獎。
 "Low Cost Degradable Polyester Fibres" Gold Medal with Jury's Commendation;
 "Functional Treatment on Knitwear by Plasma Technology" Gold Medal, 43rd International Exhibition of Inventions of Geneva, in collaboration with The Hong Kong Research Institute of Textiles and Apparel (HKRITA)
- 「MOST 150 車載娛樂系統」獲「2015 香港工商業獎:設備及機器設計獎」
 "Advanced In-Coach MOST150 Multimedia Product" Equipment & Machinery Design Award, 2015 Hong Kong Awards for Industries
- 「輕鐵網絡列車近距監控系統」獲國際工程技術學會 (IET) 頒發 2015 創新應用獎「高度讚賞」
 "Close-up Monitoring System for MTR Light Rail Network" Highly Commended Innovation Award, Institution of Engineering and Technology Innovation Awards 2015
- 生產力局 2013/14 年報榮獲國際 ARC 大獎 2014/15 「非牟利機構組別」榮譽大獎;國際 Mercury 大獎 2014/15 「公營非牟利機構:整體設計組別」金獎;香港管理專業協會 2015 最佳年報獎「優秀企業管治披露獎」
 "HKPC 2013/14 Annual Report" Grand Award in Non-Profit Organization in the International ARC Awards 2014/15; Gold Award in Overall Presentation (Publicly Funded Non-Profit) in the International Mercury Awards 2014/15; Citation for Corporate Governance Disclosure Award in the

2015 Best Annual Report Awards by Hong Kong Management Association



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聯繫持份者

Communication with stakeholders

- 接待 194 個本地、內地及海 外考察團,共 4,276 位訪客。
- Played host to 4,276 visitors and 194 delegations from the mainland, overseas and locally.



個業界諮詢活動 industry consultation events organized



可持續發展項目 Sustainability Initiatives

- 獲環境局委任為 10 億回收基金的執行伙伴及秘書處, 推動回收業的持續發展。
 - Appointed by the Environment Bureau as the implementation partner and secretariat for \$1 billion Recycling Fund to promote the sustainable development of the recycling industry.
- 與香港女工商及專業人員聯會合作推出為期18個月的「傳承惜食」 計劃,提供一個多元化的平台,以鼓勵社會大眾採取行動,減少食物浪費。
 - Launched a 18-month "FoodEver WasteNever Programme" to motivate community action for food waste reduction in collaboration with the Hong Kong Women Professionals & Entrepreneurs Association (HKWPEA).
- 由 2015 至 2020 年五年期間,繼續為新一期「清潔生產伙伴計劃」 擔任秘書處。
 - Continue to be the implementation agent for the new phase of Cleaner Production Partnership Programme from 2015 to 2020.

生產力局簡介Who We Are



生產力局的發展源於··· When HKPC's story began...

生產力局的歷史可追溯至 60 年代。當時,香港開始從轉口貿易中心發展成工業中心,衍生大量家庭式小型製造企業。有見業界的需要,政府先後於 1966 及 67 年,成立香港貿易發展局、香港出口信用保險局及香港生產力促進局,透過公營機構提供支援,大力促進香港工業的發展。

The history of HKPC dated back to the 1960s when Hong Kong began to evolve from an entrepot trading centre into an industrial centre. With the predominance of family-owned small enterprises in the manufacturing sector, the Government saw the need to provide institutional support to foster the further development of Hong Kong industry, thus the Hong Kong Trade Development Council and Hong Kong Export Credit Insurance Corporation were set up in 1966 and the Hong Kong Productivity Council (HKPC) in 1967.



機構標誌
Our Corporate Identity



生產力局的機構標誌以藍綠雙色平 行線構成,象徵本局與香港工商業 的伙伴合作關係源遠流長。

The two-toned parallel lines forming our corporate identity (CI), signify the longstanding partnership with Hong Kong industry.





生產力局及附屬公司近

With close to

700



員工 employees

每年平均為超過

HKPC and its subsidiaries provide one-stop solutions and services to more than

1000



家企業提供一站式方案及服務, 協助業界為業務增值 enterprises on average each year to add value to their business 香港生產力促進局(生產力局)於 1967 年依法成立,致力協助香港企業提升生產力,更有效地運用創意和資源,提高產品和服務的附加值。

In 1967, HKPC was established by statute to support Hong Kong companies adopt productivity-enhancing practices, enabling them to make use of their resources in a more effective and innovative fashion so as to increase the value-added content of products and services.

成立近 50 年來,生產力局在香港的工業支援架構內擔當關鍵角色。本局致力發掘、開發和轉移新技術及管理知識,以增強香港工商業在國際市場的競爭力和持續發展能力。

For close to 50 years, HKPC plays a crucial role in Hong Kong's industry support infrastructure, focusing on sourcing, developing and transferring new technologies and management knowhow to enhance the competitiveness and sustainability of Hong Kong industries in the world market.

生產力局的工作由理事會管轄,成員包括一名主席及22名成員,來自資方、勞方、學術界、專業團體和有關的政府部門。生產力局的經費部份來自政府資助,其餘來自技術和管理顧問及其它工商業支援服務收費。

HKPC is governed by a Council comprising a Chairman and 22 members, representing management, labour, academic and professional interests, as well as related government bureaux and departments in Hong Kong. HKPC's operations are mainly supported by income from its technical and management consultancy services and government subventions.

生產力局及附屬公司近700位員工,每年平均為超過1,000家企業提供一站式方案及服務,協助業界為業務增值。

With close to 700 dedicated employees, HKPC and its subsidiaries provide one-stop solutions and services to more than 1,000 enterprises on average each year to add value to their business.

生產力局位於九龍塘的生產力大樓,設有先進的製造及測試設施、展覽廳及一系列培訓設施及支援中心,迎合不同行業及科技發展的需要。本局亦在珠三角設有全資附屬公司,為港資企業提供快捷完善的支援。

HKPC's headquarters in Kowloon Tong features advanced manufacturing and accredited testing facilities, exhibition and training venues, and support centres dedicated to various technological areas and specific sectors of the industry. HKPC also operates wholly-owned subsidiaries in the Pearl River Delta to provide readily available support to Hong Kong enterprises across the boundary.

⑥ 願景、使命、價值及策略 Our Vision, Mission, Value and Strategy





策略 Strategy

與持份者攜手合作 Collaborating with Stakeholders

生產力局致力擴展及深化合作網絡, 積極與持份者探討其挑戰及所需 支援。

HKPC continues to extend its network in breadth and depth by exploring collaboration with new partners and engaging its stakeholders to address challenges pertinent to the development of the industry.

重點發展專精領域 Focusing on Areas of Excellence

為向業界推廣創新科技及先進管理概 念,生產力局必須持續發展專精領 域,提升設備,以回應本地工商業界 的訴求。

Being an important change agent in disseminating advanced technology and management best practices, it is necessary for HKPC to continuously develop areas of excellence and invest in advanced facilities to proactively respond to the emerging needs of the industry.

積極拓展支援平台 Scaling up Platforms

通過建立業界支援平台,生產力局可以 匯集公營和私營機構的資源及技術,協 力應對影響工商業界的重大課題。

In order to assist a wider spectrum of enterprises to address sectoral issues, HKPC plays an active role in setting up resource hubs for different industry sectors, through which a wide range of funding and technical support services bundled from the public and private sectors are made accessible to as many companies as possible.



(8)

我們的資本 Our Capital

所有機構都要依靠各式各樣的 「資本 | 來推動其業務的成功發展。

All organizations rely on various forms of "Capitals" as fuels to sustain their success.



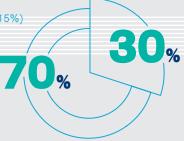
財務資本 Financial Capital

我們的經費來源 How we are funded

服務收入 Service Income

 政府資助的應用研發 項目及工商業支援項目(15%)
 Government funded applied R&D projects and industry support programmes

• 客戶項目 (55%) Client Projects 政府資助 Subvention



生產力局約三成經費來自政府年度整筆資助,而其 餘約七成主要來自各類收費服務,以及政府資助的 應用研發項目及工商業支援項目。

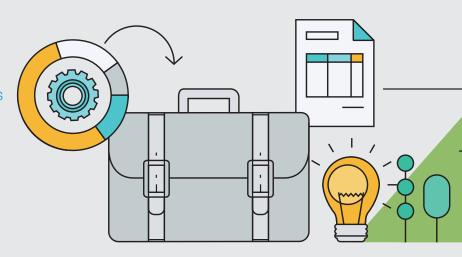
The operation of HKPC is supported by Government subvention in the form of an annual block grant which covers approximately 30% of its income. Around 70% of HKPC's income is supported predominantly by various fee-charging services and competitive Government funded applied R&D programmes and industry support initiatives.



人力資本 Human Capital

生產力局致力運用專業知識,為工商企業提供各種 高增值的解決方案,因此,人力資本是本局最寶貴 的無形資產。

As an organization providing value-added services and knowledge-based solutions, human capital is HKPC's most valuable intangible asset.



生產力局的團隊包括專業顧問及技術人員,具備良好的學術背景和 堅實的行業經驗。77%員工持有學士或以上學位,而員工更持有約 190項專業資格。

HKPC's workforce comprises professional consultants and technical staff with strong academic background and solid industry experience. Over 77% of HKPC's employees hold bachelor's or higher degrees and about 190 professional designations are conferred on its colleagues.

局內人員具備廣泛的才能及豐富的專業知識,由產品開發、製造、 測試、企業管理以至客戶服務,覆蓋整個價值鏈。

Their diverse talents and extensive expertise cover the entire value chain from product development, manufacturing, testing, business management to customer service.

員工學歷

Academic Qualification of HKPC Staff

(截至 2016 年 3 月 31 日) (as at 31 March 2016)



32 脚士

博士 Doctorate degree



263

學士 Bachelor's degree



碩士 Master's degree

146 _{其他}

Others

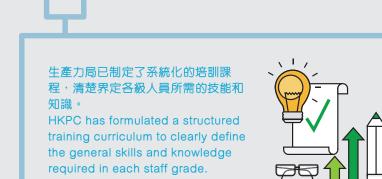


% 員工持有學士或以上學位 HKPC's employees hold bachelor's or higher degrees









生產力局亦建立完善的持續培訓制度,充份運用局內專長及外間的進修資源,讓員工掌握必要的技能,為生產力局客戶提供更優質的服務:

HKPC has established a comprehensive continuous training framework utilizing both in-house expertise and external facilities aiming to sharpen staff members' essential skills to better serve its clients:

過去一年資助

Sponsorship programme to encourage staff members to participate in external training.

263

位員工参加 employees have attended 519

項外間培訓課程及知識交流活動

training programmes and knowledge sharing events under

this programme in the past year



共資助 Sponsored

21 位員工完成學士學位課程 employees to pursue their first degree

25 位員工取得碩士或博士學位,包括 工商管理、電腦及資訊系統、電子 及信息工程、環境管理。

to pursue master's or doctorate degree in the disciplines of Business Administration, Computing & Information Systems, Electronic & Information Engineering, and Environmental Management.

每名員工平均培訓時數 Average training hours

> **19.39** 小時 hours





將員工培訓與表現評核結合,員工培訓時數及其 學術、專業、研究或社會方面的成就,亦會用作 評核員工表現。

Incorporated staff members training efforts, achievements in academia, profession, research and community in the annual appraisal assessment.

3 為創新科技署支持的創新科技 獎學金計劃 3 名獲獎者提供 實習機會

> Provided internship opportunities to 3 awardees of the Innovation and Technology Scholarship Award Scheme, supported by the Innovation and Technology Commission (ITC)



我們的資本 Our Capital





結構資本 Structural Capital

「結構資本」可定義為「員工離職或下班後,仍留在公司的所有事物」,例如:操作流程、管理系統、資訊系統、知識產權和良好典範。

Structural capital can be defined as all those things that remain in an organization after its employees have left the organization or office after work, such as operating processes, management systems, information systems, intellectual property and best practices.

生產力局擁有不同類型的結構資本,當中包括各類 無形資產,例如:品牌價值、作業流程、管理系統 及資訊科技平台,以確保本局持續運作。

HKPC is in possession of many kinds of structural capital, which incorporates all intangible assets such as brand value, processes, management systems and IT platforms that ensure the sustainable operation of HKPC.

憑藉多年來支援香港工業的服務表現,生產力局建立了備受推崇的品牌,本局的服務質素及可靠性享譽業界。

With a long track record of support for Hong Kong industry, HKPC has built up an established and highly regarded brand, with a reputation for quality and reliability.

生產力局重視創新機制,自 2000 年起推行「應用研發計劃」,每年財政預算也為計劃基金預留最少200 萬港元,支援員工進行自發的研究項目,開發新技術、管理方法和最佳工作程序。

Especially important is HKPC's innovation mechanism, it has deployed a Commercial Research and Development Scheme (CRD) since 2000. Every year, at least HK\$2 million of internal funding is earmarked in HKPC's annual budget for the CRD Fund to support R&D projects on new technologies, methodologies, services and best practices initiated by its staff.

生產力局透過資訊科技平台及知識管理機制,有系 統地收集、整理和分享資訊。

HKPC systematically captures, organizes and shares information through IT platforms and Knowledge Management (KM) mechanism.

由生產力局內部開發的知識管理技術平台 – "i-Exchange",採用了 Web 2.0 技術,建立全面的知識管理平台。該系統凝聚了局內不同範疇的專家,促進內部之間的業務協作。

HKPC's in-house developed KM Technology Platform – "i-Exchange" employs Web 2.0 technologies to build a comprehensive KM platform. The system fosters internal business collaboration by leveraging HKPC's multidisciplinary expertise.

生產力局亦推行了企業資源規劃系統(ERP),以 管理局內的主要業務運作,包括項目、財務、採購 及相關運作。

A corporate wide enterprise resource planning system (ERP) has also been deployed to manage HKPC's key business functions covering project, finance, procurement and related operations.

生產力局在生產力大樓設立產業支援中心,配備先進的設計、加工和檢測設施,用以支援的顧問服務及技術研發。大樓內亦設有「香港實驗所認可計劃」(HOKLAS)的認可實驗所。

To support its R&D and consulting services, HKPC operates industry support centres in HKPC Building equipped with advanced design, processing and testing facilities, including accredited laboratories under the Hong Kong Laboratory Accreditation Scheme (HOKLAS).

200

每年財政預算也為計劃 基金預留最少 200 萬元 HK\$2 million of internal funding earmarked for CRD scheme every year.





Industry Support Centres

創新及知識產權

Innovation & Intellectual Property



- 3D 打印體驗廊 3D Printing One
- 電腦輔助設計及製造中心 CAD / CAM Centre
- 知識產權服務中心 Intellectual Property Services Centre
- 精密光機電科技中心 Optics and Opto-Mechatronics Technology Centre

自動化

000

- D2D+ 企業自動化中心 D2D+ Business Automation Centre
- 智能機器人中心 RoboticsOne

Automation

製造科技

Manufacturing Technology



- 先進電子工藝中心 Advanced Electronics Processing Technology Centre
- 先進表面處理科技中心 Advanced Surface Technology Development Centre
- 隨形冷卻技術中心 Conformal Cooling Technology Centre
- 香港珠寶科技中心 Hong Kong Jewellery Industry Technology Centre
- 微製造科技中心 Micro Fabrication Technology Centre
- 塑膠科技中心 Plastics Technology Centre
- 精密模具技術中心 Precision Tooling Technology Centre

資訊科技

Information Technology



- 香港電腦保安事故協調中心
- 香港軟件檢測和認證中心

測試及標準

000

- Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT)
- Hong Kong Software Testing and Certification Centre

中小企業

000 Small and

Medium Enterprises

• 中小企一站通 SME One

• 電磁兼容科技中心

Electromagnetic Compatibility Centre

• 環境及產品創新化驗室

Testing & Standards

Environmental and Product Innovation Laboratory

- 香港鐘錶科技中心 Hong Kong Watch & Clock Technology Centre
- 可靠性測試中心 Reliability Testing Centre
- 香港塑膠機械性能測試中心 The Hong Kong Plastic Machinery Performance **Testing Centre**





關係資本 Relational Capital

關係資本泛指可以為機構創造價值的對外關係,例如:客戶、供應商、合作伙伴和政府部門等。

Relational capital refers to value-creating relationships that are external to an organization such as customers, suppliers, partners and government etc.

生產力局一直密切留意香港特區和內地政府的政策,並支持各項政策範疇的措施。自90年代起積極與內地政府機構建立合作網絡,成功在多個層面建立了有效的跨境溝通渠道。

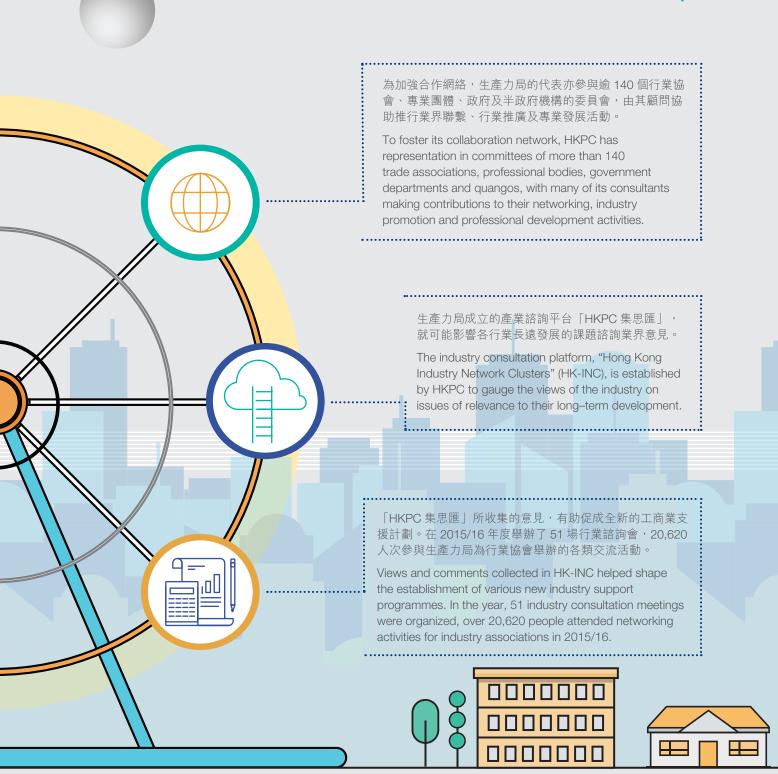
HKPC keeps close track of the HKSAR and Mainland government policies and support the Government initiatives in various policy areas. HKPC has been actively building a cooperation network with Mainland government organizations since 1990s, successfully established effective cross-boundary communication channels on many levels.

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生產力局孕育了不少行業協會的成立和發展,協助業界運用不同的資源,推動行業升級,並向政府反映業界的訴求。亦與學術機構及研究中心緊密交流合作,推動工業升級、創新及科技商品化。

HKPC nurtures the formation and development of trade associations, help them access various resources to upgrade their sectors and reflect their concerns to the Government. It also exchanges ideas and collaborates with academia and research institutes for industry upgrade, innovation and technology commercialization.





(14)

我們的持份者 Our Stakeholders



In order to apply the most effective ways to create value for its stakeholders, HKPC must identify who are the stakeholders, what are their expectations and what is important to them.

生產力局的持份者包括 HKPC's Stakeholders

政府 Government 理事會 The Council 客戶 Clients 行業協會 Industry Associations 合作伙伴 Strategic Partners 僱員 Employees 專業團體及學術機構 Professional Institute and Academia 公眾 General Public





重要性

Why they matter

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作為法定機構,生產力局必須履行其公共使命,提供配合政府政策的 服務。

As a statutory organization, HKPC has to fulfill its public mission by aligning its services with government policies.

生產力局的工作由理事會管轄,成員來自資方、勞方、學術界、專業 團體和有關的政府部門。理事會為生產力局提供策略領導。

HKPC is governed by the Council representing management, labour, academic and professional interests, as well as related government bureaux and departments. The Council provides strategic leadership to HKPC.

生產力局透過為各範疇的企業提供顧問及其他服務,履行其公共使命所得收入用作部份經費,支持持續營運。

HKPC fulfills its public mission through the delivery of consulting and other services to a wide range of enterprises and the income generated contributes to its sustainable operation.

生產力局透過行業協會接觸不同行業,藉此向業界轉移新技術及管理 方法。

Industry associations are important channels for HKPC to keep tabs on industry development and needs. They are also HKPC's key targets for transfer of technologies and management best practices.

生產力局的合作伙伴遍及多個範疇,局方充份發揮伙伴的專長,以轉 移技術和知識,並提供一站式綜合支援服務。

HKPC leverages the strengths of a wide range of strategic partners for technology and knowledge transfer, and to deliver its integrated services.

作為知識型的機構,員工是生產力局最寶貴的資產。

As a knowledge-based organization, HKPC's greatest asset is its employees.

無論是發展新技術和業務,生產力局均需要專業團體和學術機構的緊密合作和支持。

HKPC works closely with numerous professional bodies and academia as collaboration partners for new technology and business development.

公眾對本局的觀感對建立正面品牌形象非常重要。

Public perception of HKPC is crucial to the building of a positive brand image.

對生產力局的期望

What they expect of HKPC

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以務實及針對性的支援服務及計劃,迅速回應政府的 政策措施。

Respond swiftly to government initiatives with specific and practical initiatives and programmes.

建立高效的組織架構,維持良好的企業管治,履行公共使命,滿足社會需求。

To maintain good corporate governance and deliver HKPC's public mission in response to stakeholders' needs through an effective and efficient organizational structure.

提供穩定的服務水平,以獨立、專業的判斷,保障客 戶的最大利益。

To deliver a consistent level of service as well as independent and professional judgment to safeguard the client's best interest.

與行業協會保持緊密聯繫,協助各界運用不同的資源,推動行業升級,並向政府反映業界的訴求。

To maintain a close linkage with industry associations so as to help different sectors access various resources for business upgrading and to reflect their concerns to the government.

維持長期合作關係,定期提供合作機會。

To provide regular cooperation opportunities and maintain a long-term relationship.

建立積極向上的工作環境,讓員工能盡展所長,在專業及個人能力上不斷成長。

To create a positive work environment in which staff is empowered to grow professionally and personally.

作為他們與各行業的橋樑,以轉移其技術及知識。

To help them collaborate with various industry sectors to transfer their technologies and knowledge.

按照企業管治原則營運業務,並定期透過不同傳播媒介與公眾溝通。

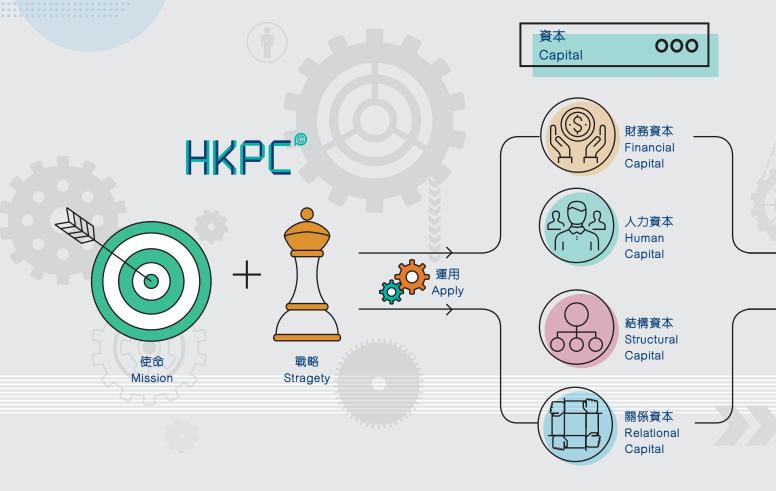
To conduct its business following the principles of good corporate governance and regularly communicate with the general public through various media.



(16)

我們的業務模式

Our Business Model



作為法定的工商業支援機構,生產力局的核心業務是協助企業和 行業,提升競爭力及可持續性,以克服外圍環境的挑戰,包括: 經濟狀況、技術轉變及環保挑戰。

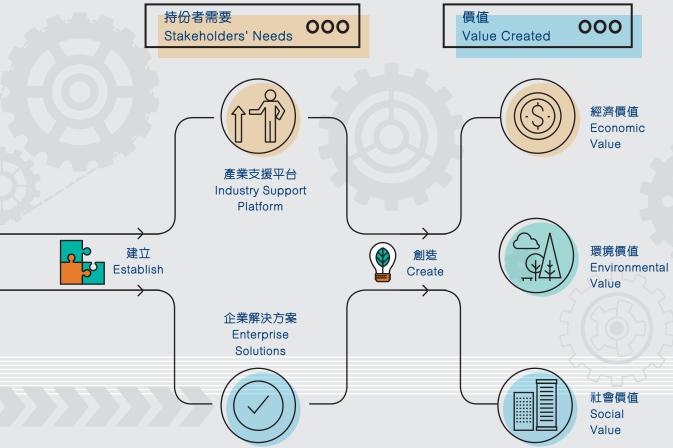
As a statutory industry support organization, HKPC's core business is to help companies and industry sectors enhance their competitiveness and sustainability to cope with challenges of the external environment, including economic conditions, technological change and environmental problems.

為此,生產力局運用各種「資本」,包括:「財務資本」、「人力資本」、「結構資本」和「關係資本」,透過本局的產業支援平台和企業支援服務,將「資本」轉化為產品、服務、技術和知識,最終創造出經濟、環境和社會價值。

To do so, HKPC needs to draw on various "capitals" including financial capital, human capital, structural capital and relational capital, and convert them into products, services, technology and knowhow through HKPC's industry support platforms and enterprise support services. Economic, environmental and social values are then created as the final outcome.









產業支援平台 Industry Support Platform

生產力局不能單靠一己之力服務香港工商業,為了擴大支援服務規模,必須借助本局以外的能力和資源。

因此,生產力局致力建立支援平台,不但為業界全面提供所需服務,更為其他主要持份者及業務伙伴創造新的商機。

HKPC can never serve Hong Kong's industries in isolation. In order to scale up its services substantively, HKPC has to leverage upon external capabilities.

In the process, HKPC creates support platforms which not only provide comprehensive services to the industries in need but also create new business opportunities for all other key stakeholders and business partners.



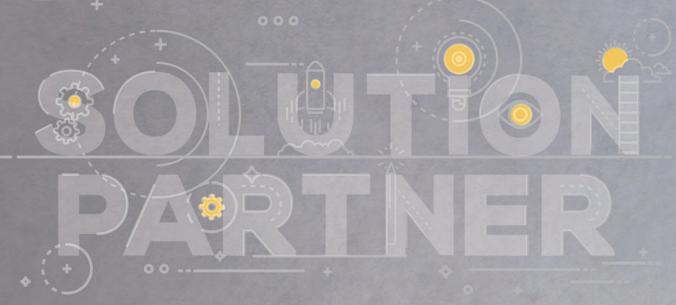
企業支援方案 Enterprise Solutions

除了產業支援服務平台,生產力局亦提供個別企業 支援服務,涵蓋整個業務價值鏈。從個別企業的支 援服務所汲取的經驗,有助其產業支援服務平台切 合業界的需要。

Besides the one-to-many service platform, HKPC also provides one-on-one enterprise support service covering the entire business value chain. These one-on-one service projects complement the service platforms and the experience thus gained will ensure that the service platforms remain relevant to the industry.



主席前言 Message From the Chairman









While I feel particularly honoured to be appointed the Chairman of HKPC, joining this statutory industry support organization is in fact a homecoming for me.

當前科技發展步伐飛快,消費模式 丕變,國際市場環境陰晴不定,香 港各行各業的企業,皆面臨前所未 有的挑戰,但與此同時,挑戰中蘊 藏無限商機。

在此重要時刻接任主席一職,確實意義重大。生產力局自60年代以來,一直在不同地域、不同行業與香港大小企業伙伴同行,提供全方位支援。

2017年,生產力局將慶祝服務香港工商業50週年。我熱切期待與本局管理層及一眾專業團隊開展工作,協助局方推出先進的創新應用科技及支援服務,為香港工商業界邁向智能製造及智慧城市的發展,作出新的貢獻。

我亦謹此向已故主席劉展灝先生致敬,劉先生自 2015 年 7 月擔任主席以來一直不遺餘力領導生產力局的發展。

最後,我亦要感謝生產力局副主席 伍志強先生,自劉主席離世後署理 主席一職。 When I served HKPC as a Council Member from 2003 to 2008, HKPC was making every effort to help Hong Kong enterprises and their offshore operations move up the value chain, especially those who have operations in PRD adapt to various newly enforced state and provincial policies which aimed at driving them towards high value adding and environmentally friendly operations. HKPC's mission became even more indispensable when Hong Kong enterprises, like countless companies in the rest of the world, were heavily hit by the global financial tsunami shortly before my tenure came to an end.

At present, rapid advancement in technologies, a sea change in consumer behaviour and volatile market environment are weighing on local enterprises. Despite these daunting challenges, business opportunities abound.

At this extraordinary juncture, I find special meanings in taking up the stewardship of HKPC, which has been the all-round productivity partner of Hong Kong enterprises, big and small, across business sectors and beyond borders since the 1960s.

In 2017, HKPC will be celebrating its 50th anniversary in serving the industry. I eagerly look forward to working with fellow colleagues in the Council and the management team to break new ground in applied R&D, introduce more timely and advanced support for the industry, and make new contributions to accelerate Hong Kong's development in smart industry and smart city.

I would like to take this opportunity to pay tribute to the late Mr Stanley Lau, the immediate past Chairman, to whom we are indebted for his exemplary leadership since July 2015.

Lastly, I sincerely extend my gratitude to the Deputy Chairman Mr Victor Ng, for his selfless dedication in standing in the chairmanship following the passing away of Mr Lau.

主席 林宣武, SBS, JP Willy LIN Sun-mo, SBS, JP
Chairman

(20)

理事會成員

Council Membership



主席 Chairman

陳鎮仁, SBS, JP

Dr Clement Chen Cheng-jen, SBS, JP

大興紡織有限公司執行董事 (自2009年7月1日至2015年6月30日) Executive Director, Tai Hing Cotton Mill Ltd. (from 1 July 2009 to 30 June 2015)

劉展灝, SBS, MH, JP

Mr Stanley Lau Chin-ho, SBS, MH, JP

運年錶業有限公司董事總經理 (自 2015 年 7 月 1 日) Managing Director, Renley Watch Manufacturing Co. Ltd. (from 1 July 2015)

林宣武, SBS, JP

Mr Willy Lin Sun-mo, SBS, JP 美羅針織廠 (國際)有限公司董事總經野

美羅針織廠 (國際) 有限公司董事總經理 (自 2016年8月6日) Managing Director,

Milo's Knitwear (International) Ltd. (assumed chairmanship starting from 6 August 2016)

副主席 Deputy Chairman

伍志強, MH (1)

Mr Victor Ng Chi-keung, MH

資方/專業/學術界代表

Management / Professional / Academic Representatives

查逸超 』 P @

Prof John Chai Yat-chiu, JP

福田集團控股有限公司董事總經理 Managing Director, Fook Tin Group Holdings Ltd.

張益麟⑶

Mr Alan Cheung

Managing Director, TML Apparel Ltd.

周博軒

Mr Felix Chow Bok-hin

駿碼科技集團行政總裁 Chief Executive Officer, Niche-Tech Corporation Ltd.

馮英偉 ⑷

Mr Wilson Fung Ying-wai

李國本 ⑸

Dr Delman Lee

聯業製衣有限公司總裁兼首席科技總監 President and Chief Technology Officer, TAL Apparel Ltd. 梁廣泉⑥

Mr Leung Kwong-chuen

Director, Union Healthcare Ltd.

梁任城

Mr Leung Yam-shing

職業訓練局副執行幹事 Deputy Executive Director, Vocational Training Council

蒙美玲

Prof Helen Meng Mei-ling

香港中文大學系統工程與工程管理學系教授及系主 Professor and Chairman, Department of Systems Engineering & Engineering Management, The Chinese University of Hong Kong

吳宏斌, BBS, MH (7)

Dr Dennis Ng Wang-pun, BBS, MH

寶星首飾廠有限公司董事總經理 Managing Director, Polaris Jewellery Manufacturer Ltd.

顏吳餘英, MH, JP

Mrs Katherine Ngan Ng Yu-ying, MH, JP

美昌玩具製品廠有限公司副總裁 Vice-President, May Cheong Toy Products Factory Ltd. 陳祖恒 ⑻

Mr Sunny Tan

聯泰控股有限公司執行董事 (鞋業及飾品) Executive Director of Footwear & Accessories, Luen Thai Holdings Ltd.

黃志光 (9

Mr Patrick Wong Chi-kwong

楊悰傑 (10)

Dr Jack Yeung Chung-kit

精英企業控股有限公司行政總裁 Chief Executive Officer, ACE Corporation Holdings Limitd







勞方代表 Labour Representatives

林錦儀(11)

Miss Lam Kam-yi

物流理貨職工會理事長 Chairperson, Logistics Cargo Supervisors Association

李秀琼 (12)

Ms Amy Lee Sau-king

港九電器工程電業器材職工會秘書長 General Secretary, Hong Kong & Kowloon Electrical Engineering & Appliances Trade Workers Union

李凱 (13)

Mr Li Hoi

香港職工會聯盟培訓中心副行政總監 Deputy Executive Director, Hong Kong Confederation of Trade Unions Training Centre

政府官員 Public Officers

卓永興 , JP (14)

Mr Cheuk Wing-hing, JP

創新及科技局常任秘書長 Permanent Secretary for Innovation and Technology

蔡淑嫻, JP (15)

Ms Annie Choi Suk-han, JP

創新科技署署長 Commissioner for Innovation and Technology

朱潘潔雯 』 戸

Mrs Hedy Chu Poon Kit-man, JP

(類美薇於 2016 年 8 月 9 日出任工業貿易署署長) Acting Director-General of Trade and Industry (Ms Salina YAN Mei-mei, JP assumed the post of Director-General of Trade and Industry on 9 August 2016)

陳李藹倫 』

Mrs Helen Chan, JP

政府經濟顧向 Government Economist

吳國強 , JP (16)

$Mr\ Byron\ Ng, \ \mathsf{JP}$

勞工處副處長 Deputy Commissioner for Labour

委員變動情況 (2016 年 1 月 1 日生效) Membership Changes (Effective Date 1.1.2016)

新任委員 New Members

張益麟

Mr Alan Cheung

馮英偉

Mr Wilson Fung Ying-wai

李秀琼

Ms Amy Lee Sau-King

李凱

Mr Li Hoi

陳祖恒

Mr Sunny Tan

離任委員 Outgoing Members

區嘯翔, BBS

Mr Albert Au Siu-cheung, BBS

鄭文聰, MH, JP

Ir Prof Daniel Cheng Man-chung, MH, JP

吳大釗 Dr David Ng Tai-chiu

冼啟明, MH

Mr Sin Kai-ming, MH

鄧燕梨

Ms Marilyn Tang Yin-lee

核數師 Auditors

羅兵咸永道

會計師事務所

PricewaterhouseCoopers

(PwC)

法律顧問 Legal Advisers

高露雲律師行

Wilkinson & Grist

鄭黃林律師行

Nixon Peabody CWL

截至 2016 年 3 月 31 日 As at 31 March 2016











「再工業化」是為我們的產業再創 造嶄新的競爭優勢,是通過創新科 技和智能化的運作模式,革新我們 的產業。「再工業化」是飛躍未來, 不是回到過去。

行政長官在2016年的施政報告中, 肯定了「再工業化」有潛力成為香 港新的經濟增長點,並指出生產力 局在協助工業升級轉型的角色。

過去一年充滿挑戰,全球金融和 政治動盪,以及內地經濟增長放 緩,令脆弱的全球經濟復甦面臨 停滯風險。

預計香港企業將繼續面對外圍經濟 環境的嚴峻挑戰,迫切需要通過技 術創新,改善效率,並提高產品和 服務的附加值。

香港特區政府於 2015 年 11 月成立 創新及科技局(創科局),為促進工 商產業廣泛採用創新科技以升級轉型,踏出關鍵的一步。作為產業支 援機構,香港生產力促進局一直與 創科局緊密合作,幫助企業鎖定新 的商業機會,並克服新技術和市場 發展趨勢所帶來的挑戰。 It is about renewing the competitive advantages of our industries by way of using innovative technologies and smart operation models. It is a leap towards the future rather than a restoration of the past.

In his 2016 Policy Address, highlighting the role of HKPC in facilitating industrial upgrading and transformation, the Chief Executive of the HKSAR has affirmed the significance of "reindustrialization" as a potential area of economic growth for Hong Kong.

The past year was exceptionally challenging. The already weak global economic recovery was further stalled by global financial and political volatility as well as the slowing down in Mainland's GDP growth.

As Hong Kong enterprises are expected to face tough challenges arising from the external economic environment in the foreseeable future, there is a pressing need for them to uplift their efficiency and add value to their products and services through technology innovation.

The establishment of the Innovation and Technology Bureau (ITB) by the HKSAR Government in November 2015 is a crucial step to promote a wider adoption of innovation and technology in industrial upgrading and business transformation. As an industry support organization, HKPC is working closely with ITB in helping enterprises tap new business opportunities and overcome challenges arising from new technology and market trends.



服務需求持續增長

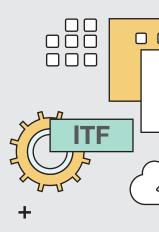
營商環境雖然充滿挑戰,但本局繼續加強對香港工商業的支持,可見之於2015/16 年度業界對本局服務的殷切需求。我們的整體服務收入為\$4.37 億元,較2014/15 年度增長9.3%。年內,我們共推行917 個顧問項目,客戶滿意度調查的得分為8.92 (10 分最高)。

本局按照三大策略 ——「與持份者攜 手合作」、「重點發展專精領域」及 「積極拓展支援平台」,推展工商業 支援服務。

Robust demand for HKPC's services

Against all odds in the business environment, we spared no effort to strengthen our support in order to meet the robust demands from Hong Kong industries. In 2015/16, our total service income was \$437 million, representing an increase of 9.3% over that of 2014/15. We have undertaken a total of 917 consultancy projects in the year, and scored 8.92 on a scale of 10 in our customer satisfaction survey.

Our industry support services are steered by a three-pronged strategy of "collaborating with stakeholders", "focusing on areas of excellence" and "scaling up platforms". We have made solid progress in each of these strategic areas to meet the demands of Hong Kong industry.



與持份者攜手合作

為了促進「工業 4.0」,並幫助企業了解國家的「中國製造 2025」策略,香港生產力促進局正積極與這領域的主要參與者建立策略伙伴關係。

工業 4.0 策略伙伴

年內,生產力局與 Asprova 和 Epicor 兩家致力推動智能技術的領先軟件公 司簽署合作協議,將其解決方案與本 局的生產和材料技術知識整合,合作 推動本地產業採用智能生產管理。

本局繼續伙拍德國 Fraunhofer 生產技術研究所 (IPT),以向香港企業推廣工業 4.0 的概念。生產力局的顧問更獲 IPT 認證為「認可工業 4.0 培訓師」,將開展對行業從業員的認證培訓。本局亦與 IPT 合作發展工業智能工廠認證計劃,以評估和核實本土廠商在推行工業 4.0 的成熟水平。

Collaborating with Stakeholders

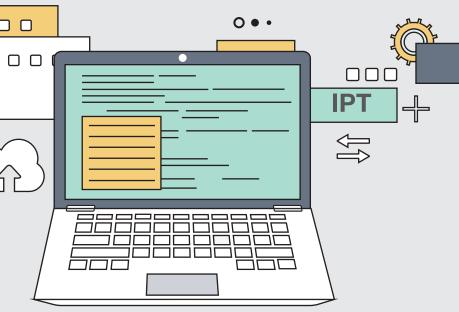
To promote "Industry 4.0" (i4.0) and help enterprises seize opportunities under the "Made in China 2025" strategy initiated by the Central Government, HKPC is proactively establishing strategic partnership with key players in this area.

Strategic Partnership for Industry 4.0

During the year, HKPC signed collaboration agreements with Asprova Corporation and Epicor Software Corporation, two leading technology firms spearheading this revolutionary concept. By integrating their solutions with HKPC's knowledge in production and materials technologies, the partnership will enhance the adoption of smart production management in local industry.

Moreover, HKPC continues to partner with the Fraunhofer Institute for Production Technology (IPT) of Germany to promote the concept of i4.0 to Hong Kong enterprises. HKPC's consultants, accredited by IPT as "Certified i4.0 Trainer", will conduct certified training for industry practitioners. HKPC is also developing an "i4.0 Smart Factory Certification" scheme in collaboration with IPT to assess and verify the level of i4.0 maturity of local manufacturers.







工商組織合作

為了解業界對不同行業長遠發展的見解,以及所需的政策和技術支援,生產力局本年度舉辦了 51 個業界諮詢會議,其中主要是通過我們的「HKPC集思匯」諮詢平台舉行,出席者包括政府、半官方機構、工商團體和企業,討論有關電動車、回收基金、香港廠商回流和鐘錶業發展等課題。

香港生產力促進局一直是工商行業協會的重要合作伙伴,攜手加強本港各行業中小企的競爭力。

生產力局獲創新及科技基金的資助,以及 50 個行業協會和相關組織支持,展開橫跨多個行業的「工業 4.0」推廣活動。其中一項主打活動是將在 2016 年 7 月舉行為期三天的國際會議及三個「智能」研討會,探討「工業 4.0」的實施策略、最新的關鍵技術和第四次工業革命的商業機會。

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Funded by the Innovation and Technology
Fund (ITF) and with the support of about 50
trade associations and related organizations,
during the year, HKPC launched an industrywide campaign on i4.0. One of the flagship
activities is a three-day international
conference and three "Smart" seminars
scheduled for July 2016 to present the
implementation strategies, latest enabling
technologies and business opportunities of
the fourth industrial revolution.

Partnership with Trade Associations

To gauge industry's views on the long term development of different sectors as well as to identify their needs of government and technical support, HKPC organized 51 industry consultation meetings during the year, most of which were convened through our major consultation platform, HK-INC, with participants from the Government, quangos, trade and industry organizations and business to discuss issues relating to electric vehicles, the Recycling Fund, relocation of Hong Kong manufacturers and development of watch industry.

HKPC is a major partner of industry and trade associations in enhancing the competitiveness of Hong Kong's SMEs in various sectors.





總裁匯報

Executive Director's Review



年內,生產力局與不同行業的協會合作,包括汽車服務、電器、手錶、關鍵零部件和金屬、航空、中醫藥、印刷和旅館等行業,一起展開9個中小企業發展支援基金資助項目,在質量保證、經營管理、產品創新、行業推廣,以及發展高增值市場等不同領域,增強中小企業的競爭能力。

During the year, in collaboration with trade associations from various sectors such as automobile services, electrical appliance, watch, critical components and metals, aviation, Chinese medicine, printing and hostels, HKPC launched 9 projects sponsored by the SME Development Fund to enhance the competence of SMEs in quality assurance, operation management, product innovation, industry promotion as well as to capture opportunities in high value adding market sectors.

重點發展專精領域

生產力局一直致力推廣先進技術及管理模式,促進工商業變革,故此,本局須不斷發展專精領域,投資先進設施,主動回應行業的新興需求。

卓越品質

在2015年11月,國際標準化組織(ISO)技術委員會176 (TC 176)年度大會在香港正式召開,由創新科技署主辦,生產力局與香港檢測和認證局協辦。ISO/TC 176 專責質量管理範疇的標準化工作,包括ISO 9001 質量管理標準。

Focusing on Areas of Excellence

Being an important change agent in disseminating advanced technology and management best practices, HKPC needs to continuously develop areas of excellence and invest in advanced facilities to proactively respond to the emerging needs of the industry.

Quality Excellence

In November 2015, the annual meeting of the International Organization for Standardization (ISO)/Technical Committee 176 (TC 176) was held in Hong Kong, hosted by the ITC. ISO/TC 176 creates and manages standards in the field of quality management and is responsible for the ISO 9001 quality management standard. HKPC co-organized the meeting with the Hong Kong Council for Testing and Certification.







在 2015/16 年度,生產力局推出了 30 項新服務 和產品,成功將 21 項產品 (或技術)商品化,註冊了 13 項專利 (或授權/特許權),開展 38 個新研發項目。其中許多研發項目皆獲業界贊助,對我們研發成果的市場潛力投下信心一票。

In 2015/16, HKPC introduced 30 new services and products, commercialized 21 products (or technologies), registered 13 patents (or licences/royalties), commenced 38 new R&D projects. Many of these R&D projects are also sponsored by the industry, which is a vote of confidence in the promising market potential of our R&D results.

出席會議的代表來自約 45 個國家和地區,包括內地和香港,及逾 10 個國際及區域組織和其他 ISO 技術委員會。會議有助推進對制定標準化過程和相關認可及認證工作的認識。



Representatives from about 45 countries and regions, including the Mainland and Hong Kong, as well as over 10 international and regional organizations and other ISO Technical Committees joined the meeting. The event promoted knowledge of the standardization process and relevant accreditation and certification work.

應用研發

除了企業管理,生產力局也在應用研究與發展方面 發揮積極作用,協助香港企業把上游研發成果轉化 為可面市的產品,創造新的商業發展機會。

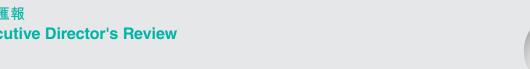
其中,於2013年8月展開的首個「香港品牌」電動巴士研發項目於本年度完成,金額合共近4,000萬元,由「創新及科技基金」撥款及業界合作伙伴贊助。

Applied R&D

Besides disseminating management best practices, HKPC is also playing an active role in applied research and development (R&D), helping Hong Kong industries transform upstream R&D results into market-ready products – a springboard to potential business growth.

A notable example is the first-ever "Made by Hong Kong" electric bus completed in the year. It was the R&D result of a close to \$40 million R&D project commencing August 2013, funded by the ITF and sponsored by an industry partner.









在環保科技領域,我們已經成功開發出一種創新的 技術,把廚餘轉化為有價值的物料和可用作另類燃 料的沼氣,生產力局將與業界伙伴合作,共同在內 地市場推廣這系統。

除了業界反應良好,我們許多研發項目也獲國際及 本地獎項,其中與香港紡織及成衣研發中心 (HKRITA) 合作的兩個項目在第43屆「日內瓦國際發明展」中 取得兩項金獎,包括獲取評審團特別嘉許金獎的「低 成本可降解纖維」,以及獲取金獎的「等離子毛衣 功能性處理」。我們的「MOST150 巴士多媒體光纖 網路設備」亦在「2015香港工商業獎」獲得「設備 及機器設計獎」。

3D 打印一站式支援

生產力局在香港推廣 3D 打印技術超過二十年。我們 於 1995 年設立亞洲首家快速原型科技中心。自此以 來,生產力局平均每年處理超過 400 個與 3D 打印 有關的項目。憑藉我們的豐富經驗,生產力局再創 新里程,新的一站式 3D 打印技術中心 —— 「3D 打 印體驗廊」在2015年8月正式啟用。

In the area of green technology, we have successfully developed an innovative three-stage process to convert food waste into valuable materials and biogas. HKPC will collaborate with an industry partner to jointly promote the developed system on the Mainland.

On top of receiving positive market feedback, many of our R&D projects have won international and local accolades, including two gold medals in the 43rd International Exhibition of Inventions of Geneva for two of our joint projects with the Hong Kong Research Institute of Textiles and Apparel (HKRITA) - "Low Cost Degradable Polyester Fibres" and "Functional Treatment on Knitwear by Plasma Technology". Our "Advanced In-Coach MOST150 Multimedia Product" also won the Equipment & Machinery Design Award in the 2015 Hong Kong Awards for Industries.

One-stop 3D Printing Support

HKPC is a pioneer in driving the adoption of 3D printing technology in Hong Kong for more than two decades. We established the Rapid Prototyping Technology Centre in 1995, which was the first of its kind in Asia. Since its inception, HKPC has been handling over 400 3D printing orders on average every year. Building on our solid experience in this area, HKPC laid another milestone in the past year with the launch of a new one-stop 3D printing technology centre in August 2015.







「3D 打印體驗廊」全方位展示不同 3D 打印方案和一系列由入門到專業級的 3D 打印機及相關設施,配合本局 3D 打印專家和技術應用的豐富經驗,讓不同行業的工商企業及各界人士使用這種革命性的技術,實現創意,培育香港的創新文化。

Home to a comprehensive spectrum of software and hardware, from elementary to professional grade, the new centre stands out with unparalleled support from HKPC's wealth of 3D printing experts and solid experience in technology application. It enables individuals and enterprises to use this revolutionary technology to give life to their creative ideas, fostering a culture of innovation in Hong Kong.

香港學生衝出地球

生產力局全力推動由民政事務局和中國載人航天 工程辦公室合辦的「香港中學生太空搭載實驗方案 設計比賽」,旨在鼓勵中學生設計出適合於太空環 境進行的實驗,並藉以加深對國家在航天科技發展 方面的認識。我們非常高興比賽的反應熱烈,令人 欣慰。

生產力局正與中國載人航天工程辦公室的專家合作, 把得獎方案製成適合的實驗品,一經中國載人航天 工程辦公室測試成功,將有機會於「天宮二號」太 空實驗室在無重狀態下進行實驗示範。

From Earth to Space

HKPC is at full throttle as an implementation agent for the Space Science Experiment Design Competition co-organized by the Home Affairs Bureau and the China Manned Space Agency. The Competition aims at encouraging secondary students across the territory to design experiments that are feasible for being carried out in space while enhancing their understanding of the remarkable achievements in aerospace development in Mainland. We are glad that the Competition received an enthusiastic response.

Banking on our engineering expertise, HKPC is working with aerospace experts of the China Manned Space Agency to construct the three winning designs into models feasible for experiment in space. Designs that can pass the rigorous tests of the China Manned Space Agency will be carried onboard Tiangong-2 for demonstration in zero gravity.











培育產業人才

作為香港職業教育的先驅之一,近 50 年來,生產力局致力為香港產業的持 續發展培育人才。

在本年度,配合政府推動終身學習和 持續人力發展,本局的生產力培訓學 院 (PTI) 已通過香港學術及職業資歷評 審局的評審,成功達到資歷架構第五 級別,目前正提供資歷架構認可的專 業證書課程。

積極拓展支援平台

生產力局致力於建立業界支援平台, 以匯集公營和私營機構的資源及技 術,協助更多不同行業的工商企業解 決難題。

提升回收業

政府於 2015 年 10 月推出總額 10 億 的回收基金,以促進回收業的可持續 發展,並由環境局委任本局為該計劃 的執行伙伴和秘書處。生產力局熟諳 回收業運作,擁有的經驗和知識有助 與業界有效溝通,公正和專業地處理 項目建議書。

回收基金諮詢委員會在過去一年批准 29 項資助項目,合共批出 2,800 萬元 資助獲批的企業項目,涉及處理各種回 收物料,並由不同規模的回收商提出。

Industry Talent Development

As one of the forerunners of vocational education in Hong Kong, HKPC is dedicated for almost 50 years to close the skill gaps which hinder the further development of Hong Kong industry.

During the year, in support of the Government's initiative to promote life-long learning and sustainable manpower development, HKPC's Productivity Training Institute (PTI) has obtained the accreditation from Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) under the Qualifications Framework (QF) at Level 5. PTI is currently offering QF-recognized professional certificate programmes.

Scaling Up Platforms

In order to assist a wider spectrum of enterprises to address sectoral issues, HKPC plays an active role in setting up resource hubs for different industry sectors, through which a wide range of funding and technical support services bundled from the public and private sectors are made accessible to as many companies as possible.

Upgrading Recycling Industry

The Government introduced a \$1 billion Recycling Fund in October 2015 to promote the sustainable development of the recycling industry. HKPC was appointed by the Environment Bureau as the implementation partner and secretariat for the scheme. With our expertise and experience in the trade, HKPC is best positioned to perform this role, functioning as an effective communicator with the industry, and an impartial professional to evaluate the project proposals.

The Advisory Committee on Recycling Fund has approved 29 funding applications totaling \$28 million in the past year. The proposals involve the handling of different recyclable materials proposed by recyclers of varying scale.





BUD 申請易

自「發展品牌、升級轉型及拓展內銷市場」(BUD專項基金)於2012成立以來,生產力局一直為專項基金的企業支援計劃(ESP)擔任秘書處。

為便利企業申請,2015 年 8 月推出了新的「ESP申請易 - 簡易申請計劃」 (「ESP申請易」),通過簡化的申請程序,資助企業在內地推行提升競爭力和拓展內地市場的措施。ESP申請易推出以來,2015/16 第三及第四季共有335 宗申請,與前兩季167 宗申請比較,申請數目明顯上升。

支援中小企

憑藉我們在服務零售行業的豐富經驗,和與資訊科技業的緊密合作關係,生產力局一直全力支持 2014 年推出的「零售業人力需求管理科技應用支援計劃」(簡稱 ReTAAS),本年度,計劃共批出超過 4 百萬元資助超過 120 個申請項目。

為方便中小企搜尋發展資源,生產力局於 2012 年成立了「中小企一站通」 (SME One),提供一站式支援,協助本地中小企充份利用香港及珠三角的支援與資助計劃。過去兩年,「中小企一站通」處理了超過 5,400 宗查詢,舉辦逾 200 個論壇及工作坊,共吸引8,500 多位中小企代表參與。

「中小企一站通」於本年度推出「中小企好幫手」流動應用程式,讓中小企能隨時隨地掌握切合業務需要的資助計劃詳情,網羅 13 間機構 30 多個資助計劃,並可得悉生產力局的第一手活動及服務資訊。

BUD Easy

HKPC has been acting as the secretariat for the Enterprise Support Programme (ESP) of the Dedicated Fund on Branding, Upgrading and Domestic Sales (the BUD Fund) since its inception in 2012.

With a view to allowing more flexibility for applicants, a new "ESP Easy – Simplified Application Track" ("ESP Easy") was launched in August 2015 to help eligible enterprises apply for funding through simplified procedures for implementing specified measures to enhance their competitiveness in the Mainland domestic market. Following the launch of "ESP Easy", there was a significant increase in the number of ESP applications in the third and fourth quarters of 2015/16 with 335 applications in total as compared to 167 applications in preceding two quarters.

Supporting SME

Banking on our rich experience in serving the retail sector and close partnership with the local IT industry, HKPC has been delivering robust support for the promotion and implementation of the "Retail Technology Adoption Assistance Scheme for Manpower Demand Management" (ReTAAS) since 2014. Over \$4 million funding has been approved for more than 120 applications in the year.

Aiming to enhance SMEs' accessibility to development resources, SME One, a dedicated centre was established in 2012 by HKPC to provide one-stop support to help local SMEs utilize the variety of support and funding schemes available in Hong Kong and the Pearl River Delta region. During the past two years, it has handled more than 5,400 enquiries on various funding and industry support schemes, organized more than 200 workshops and forums, and have attracted participation from about 8,500 SME representatives.

During the year, SME One launched the user-friendly "SME Biz Easy" mobile application, containing information of over 30 funding schemes from 13 organizations. On their fingertips, SMEs can easily identify funding schemes that suit their business needs, and get the most up-to-date information on HKPC's services anytime, anywhere.



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「3D 打印體驗廊」2015 年 8 月啟用 以來,公眾和商界反應熱烈,參觀人 次近 8,000,處理了660 宗查詢,向 我們的技術專家轉介220 個服務個案。

我們於 2015 年成立全港首個「智能機器人中心」,提供一站式應用技術支援,集顧問服務、技術示範、應用方案開發及培訓於一身,讓業界易於開展智能自動化生產計劃。

科企及測試支援平台

生產力局與香港科技園合辦的 TecONE 資源中心,為中小型科企提供資助及支援計劃諮詢服務。年內,TecONE 安排了 287 場免費諮詢會,處理 910 宗查詢及轉介 362 宗個案,協助科企尋找伙伴及服務供應商。

為加強「Lab Test One」一站式測試 支援計劃,生產力局與香港科技園亦 合作推出「Lab Test One」網上平台 (www.LabTestOne.org) 及流動應用程 式,讓本港工商企業快捷查詢 37 所公 營實驗室的先進檢測設施及服務資料。 3D Printing One, HKPC's new platform for promoting 3D printing technology, also received enthusiastic response from the public and business community. Since its opening in August 2015, 3D Printing One has received close to 8,000 visitors, and handled about 660 enquiries and 220 service referrals by our technical experts.

In November 2015, we opened the first one-stop smart robotics application support centre in Hong Kong – "RoboticsOne". Offering consultancy service, technology demonstration, robotics solutions development and training under one roof, RoboticsOne can facilitate industries to embark on the fast track to intelligent manufacturing.

Tech and Test

TecONE, a joint initiative by HKPC and the Hong Kong Science and Technology Parks Corporation (HKSTPC), provides advisory services on funding and other support programmes to SME technology start-ups. In the year, it arranged 287 free consultation meetings, handled 910 enquiries and 362 referrals to help technology SMEs source potential partners and service providers.

HKPC and HKSTPC also stepped up the support under the Lab Test One programme, a new portal (www.LabTestOne.org) and a mobile application were launched to help local enterprises tap the resources of 37 laboratories and testing facilities from collaborating partners.



總裁匯報

Executive Director's Review





從 1967 到 2017

明年將是香港生產力促進局 50 週年。 我們見證了、推動了香港的經濟轉型。 近半世紀以來,憑藉本局的人才和專業 知識,生產力局一直成為業界應對營商 環境轉變的最佳企業方案伙伴之一。

我們將會舉辦特別的活動,與業界和 公眾重溫香港的工業和生產力局過去 的成就,期待能將這股企業家自強不 息的精神傳承下去,為香港的工商業、 為香港再創驕陽!

生命無常往往是人生的常理。我們對前主席劉展灏先生在2016年6月12日突然離世深感悲痛。劉先生的一生,正是香港精神的典範。衷心感謝劉先生在他短暫的任期內不遺餘力策劃生產力局的發展。他對服務香港工商業的熱情,必定成為本局仝人的榜樣。

政府已委任林宣武先生為香港生產力促進局主席,任期兩年,由2016年8月6日起生效。作為經驗豐富的工業家,更曾於2003至2008年擔任香港生產力促進局的理事會成員,深信林主席將帶領生產力局迭創高峰,引領香港業界邁向智能製造、智能商業的新世代。

最後,特別多謝理事會成員的全力 支持,以及政府、業界和社會各界的 合作伙伴。亦感謝全體同事在過去 一年發揮無比熱忱,協力服務業界及 社群。

From 1967 to 2017

Next year will be HKPC's 50th Anniversary. We have witnessed and shaped the economic transformation of Hong Kong. For almost half a century, our expert team has made HKPC one of the best solution partners of our industries in adapting to the ever-changing environment.

Through organizing special anniversary activities to revisit the achievements of Hong Kong industry and HKPC in the past, we look forward to passing on the enterprising spirit that has made our industry great and this city a place we are so proud of.

It is very true that the only thing predictable about life is its unpredictability. We are deeply saddened by the passing away of our former Chairman Mr Stanley Lau on 12 June 2016. His life story is truly a success of the "can-do" spirit of Hong Kong. We are most grateful to his devotion and exemplary leadership during his brief tenure. His passion for serving Hong Kong industry will be a role model for all of us.

The Government has appointed Mr Willy Lin Sun-mo as Chairman of HKPC for a period of two years starting from 6 August 2016. As a seasoned industrialist and a veteran member of the HKPC's Council from 2003 to 2008, Mr Lin will undoubtedly guide HKPC to go from strength to strength in steering Hong Kong industry towards a new era of smart manufacturing and smart business.

Lastly, I would like to convey my heartfelt thanks to all Council Members for their unrelenting support as well as our many partners in the Government, industry and the community. Last but not least, I would like to thank the staff of HKPC for their dedicated and concerted efforts made in the year.

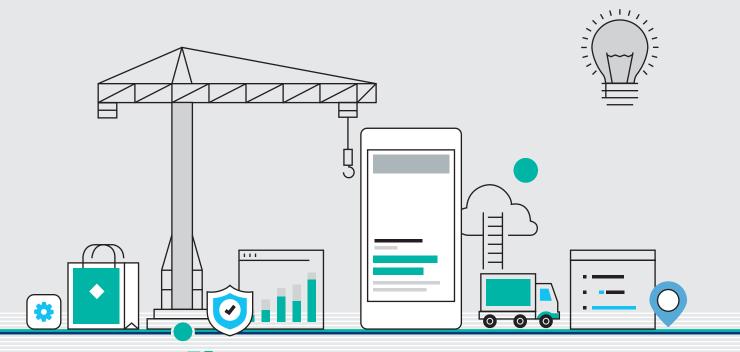
總裁 麥鄧碧儀, MH, JP Agnes Mak, MH, JP Executive Director





年度剪影 Year in Pictures





APR 四月 2015



生產力局屬下「汽車零部件研究及發展中心」舉辦 APAS R&D Centre Showcase 2015,以「綠色運輸 生活共融」為主題。

The Automotive Parts and Accessory Systems (APAS) R&D Centre of HKPC organized the APAS R&D Centre Showcase 2015 under the theme of "Latest Market and Technology Trends of Auto Industry".



生產力局研發「可降解人造纖維」和「工業級等離子毛衣處理系統」,於「第43屆日內瓦發明展」分別榮獲「評審嘉許金獎」及「金獎」殊榮。

HKPC has successfully developed "Degradable Synthetic Fibres for Textile Industry" and the "Functional Treatment on Knitwears by Plasma Technology". These innovative technologies won the "Gold medal with congratulation from jury" and "Gold medal" respectively in the recent "43rd International Exhibition of Inventions Geneva".



公布 2015 年第二季「渣打香港中小企領先營商指數」。

Announced the second quarter report of 2015 Standard Chartered Hong Kong SME Leading Business Index.











與香港科技園公司合作推出「Lab Test One」網上資訊平台及流動應用程式。

Jointly launched the Lab Test One online platform and mobile application with the Hong Kong Science and Technology Parks Corporation.



舉辦「香港中學生太空搭載實驗方案設計比賽」頒獎典禮。

Organized the award presentation ceremony of the Space Science Experiment Design Competition for Hong Kong Secondary School Students.

夜繼藝廊

夜貓 Online 網上青年外展工作先導計劃 (夜貓 Online) 獲頒 2015 香港資訊及通訊科技獎 - 最佳數碼共融獎銀獎。

Nite Cat Online-Pilot Cyber Youth Outreaching Project won the Hong Kong ICT Awards 2015 - Best Digital Inclusion Sliver Award.

MAY 五月 2015





舉辦「HKPC集思匯」業界諮詢會,與業界探討住宅區內安裝電動汽車充電基礎設施的可能性。

Convened the HK-INC consultation session to gauge the views of the industry on installing EV infrastructure for residential areas.



舉辦「滙智營商」高峰會 2015,今年以「轉變中的動力與機遇」為主題,逾 600 家工商企業代表出席。

Organized the Wise Business Summit 2015 under the theme of "Growth & Opportunities in a Changing Landscape", the Summit attracted more than 600 businesses and entrepreneurs from different industries.



連續三年與香港提升快樂指數基 金合辦「開心工作間」推廣計劃。

Organized the "Happiness-at-Work Promotional Scheme" with the Promoting Happiness Index Foundation for the third consecutive year.



年度剪影 Year in Pictures





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公布 2015 年第三季「渣打香港中小企領先營商指數」。

Announced the third quarter report of 2015 Standard Chartered Hong Kong SME Leading Business Index.



香港無線科技商會委託生產力局進行「香港智能手機應用程式業界 調查」,就行業前景、市場分析、技術應用等範疇作出調查和建議。

Commissioned by the Hong Kong Wireless Technology Industry Association, HKPC conducted the Hong Kong Mobile Apps Industry Survey to study the business prospects, market and technology adoption among local industry players.

JUL 七月 2015



政府委任資深工業家劉展灝先生(圖左)接替 陳鎮仁博士出任香港生產力促進局主席。

Appointed by the Government, Mr Stanley Lau Chin-ho (left) succeeded Dr Clement Chen Cheng-jen as Chairman of the Hong Kong Productivity Council.



編制「ISO 14006:2011 生態化設計及製造 實施手冊及案例全集」,介紹實行生態化設 計的方法及相應的設計體系。

Compiled an ISO 14006:2011 handbook, providing guidelines on implementing ecodesign and the relevant design systems.







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啟動「第三屆動畫支援計劃」 為 15 家入選企業提供資助、導 師指導、技術培訓等,支持製作 原創動畫。

Launched the 3rd Animation Support Program. 15 companies were selected for receiving a production subsidy, professional mentorship and training to produce their original animation works.



成立全港首個提供一條龍 3D 打印顧問服務支援中心 — 「3D 打印體驗廊」。

Opened the first one-stop 3D printing support centre in Hong Kong - "3D Printing One".



AUG 八月 2015



舉辦「HKPC集思匯」業界諮詢會, 探討如何提升行內員工對電動車及相 關設備的維修保養知識,並加強行內 專業形象,吸引更多人入行。

Convened the HK-INC consultation session to explore the ways to strengthen EV repair and maintenance knowledge of industry practitioners, and enhance their professional image to facilitate talent recruitment.



本局與日本 Asprova Corp 建立策略伙伴,引進「工業 4.0」 智能生產排程科技。

Established strategic partnership with Asprova Corporation to introduce Industry 4.0 intelligent production scheduling.





舉辦「HKPC 集思匯」業界 諮詢會,介紹回收基金的機 制及運作,與回收業界及商 會代表交流意見。

Convened the HK-INC consultation session to introduce the mechanism and operation of the Recycling Fund and exchange views with participants from the industry and businesses.



年度剪影 **Year in Pictures**





生產力局屬下的「香港電腦保安 事故協調中心」及專業資訊保安 協會為 130 個常用的香港網上交 易服務流動應用程式進行通訊保 安測試。

The HKPC-managed Hong Kong Computer Emergency Response Team Coordination Centre and the Professional Information Security Association conducted a study to test the transaction security of 130 Hong Kong online transaction service apps commonly used locally.

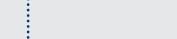




本局與 Epicor 簽訂合作備忘錄,進行先導計劃,引進智能化生產管理,邁向 「工業 4.0」。

Established strategic partnership with Epicor to launch a pilot collaboration scheme and introduce smart production management for "Industry 4.0".

SEPT 九月 2015





舉辦「資訊保安高峰會 2015」以「流動技術、大數 據分析、雲端運算及物聯網 – 是敵是友?」為題。

Organized the "Information Security Summit 2015" under the theme of "Information Anywhere Anytime -Mobile, Analytics, Cloud, IoTs - Security Friends or Foes".



舉辦「HKPC 集思匯」業界諮詢 會,探討電動車零件及電池回收 和安全棄置。

Convened the HK-INC consultation session to address the issue of recycling and safe disposal of EV parts and batteries.



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舉辦「HKPC 集思匯」業界 諮詢會,探討提升企業能力, 支援香港工業回流的議題。

Convened the HK-INC consultation session to collect views on industry support for reshoring.











生產力局成功開發全港首輛「香港品牌」電動巴士。

Launched the first-ever "Made by Hong Kong" electric bus.



環境保護署成立總額十億元的回收基金,生產力局為 基金的執行伙伴,並提供秘書處服務。

The Environmental Protection Department set up a \$1 billion Recycling Fund, HKPC serves as the implementation partner as well as the Secretariat for the Fund.



OCT 十月 2015 NOV 十一月 2015



公布 2015 年第四季「渣 打香港中小企領先營商 指數」。

Announced the fourth quarter report of 2015 Standard Chartered Hong Kong SME Leading Business Index.



成立全港首個「智能機器人中心」,推動工商業活用智能自動化。

Set up the first one-stop robotics application support centre in Hong Kong – "RoboticsOne" to boost smart production.









HKPC helped the Hong Kong Convention and Exhibition Centre Management Limited to obtain the ISO 20121 international standard on sustainability management system, the first organization attained the certification in Hong Kong.

年度剪影 Year in Pictures







與香港工業總會和珠三角工業協 會在江門舉行第十四屆「香港珠 三角工商界合作交流會」。

Organized the 14th Hong Kong-PRD industry networking event in Jiangmen with the Federation of Hong Kong Industries and PRD Council.



舉辦「第六屆香港傑出企業公民獎」表揚企業及團體履行及推廣企業社會責任的傑出表現。

Organized "The 6th Hong Kong Outstanding Corporate Citizenship Awards Presentation Ceremony" to recognize organizations and teams with outstanding achievements in implementing and promoting corporate social responsibility.



DEC 十二月 2015







由生產力局研發的「MOST150 巴士多媒體光纖網路設備」, 獲得「2015 香港工商業獎」的「設備及機器設計獎」。

Developed by HKPC, the MOST150 Multimedia Optical Networking Product for Coaches has won the 2015 Hong Kong Awards for Industries: Equipment and Machinery Design Award.









舉辦「HKPC集思匯」鐘錶業業 界諮詢會,探討業界面對科技及 市場轉型所需要的政策及技術支 援,以及鐘錶業未來的發展方向 及策略。

Convened the HK-INC consultation session for the watch industry to collect the industry's views on government and technical support to address challenges arising from technology and market changes.





公布 2016 年第一季「渣打香港中小企領先營商指數」。

Announced the first quarter report of 2016 Standard Chartered Hong Kong SME Leading Business Index.



生產力局成功通過評審,獲頒 OHSAS 18001 職業健康安全管理體系認證,展示最佳管理典範。

HKPC attained the OHSAS 18001 Occupational Health and Safety Management System certification.

JAN 一月 2016

2016

MAR 三月 2016



舉辦「香港再工業化 — 轉變與機遇」研討會,深入分析「再工業化」如何創造就業、縮短生產週期和拓展發展機遇。

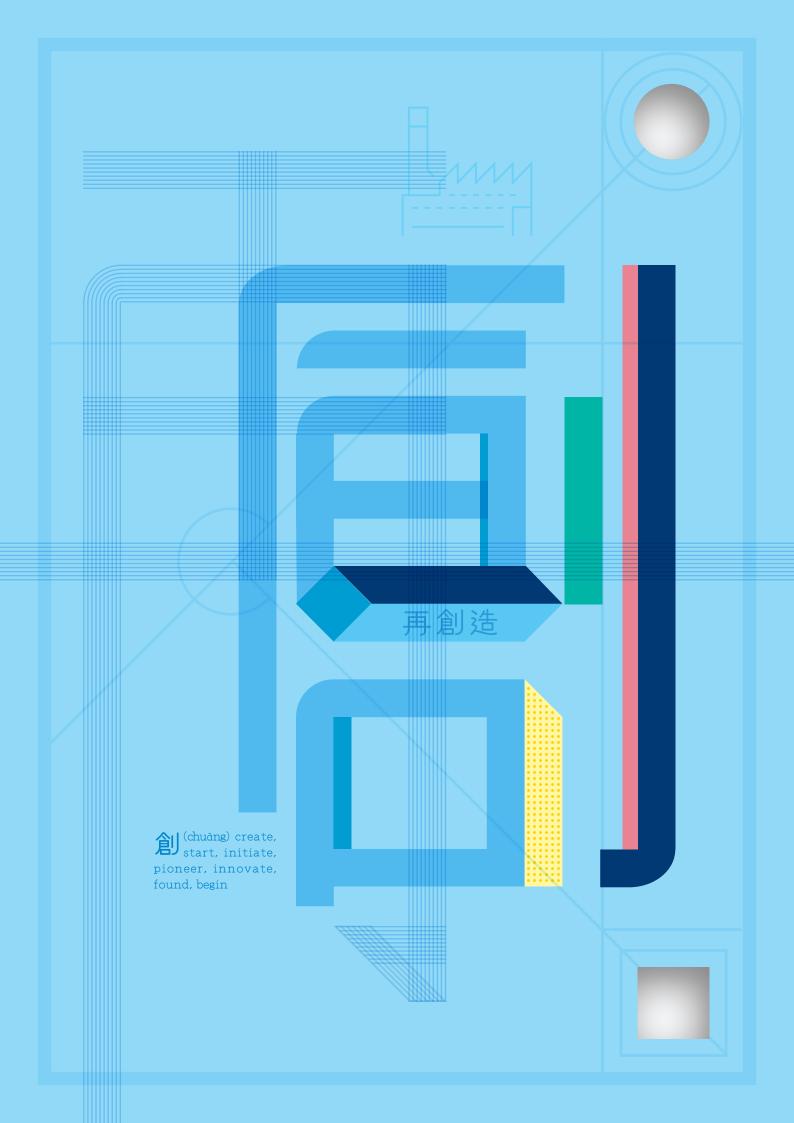
Organized the "Re-industrialisation - Impact and Opportunities for Hong Kong" seminar to explore how re-industrialisation can create more jobs, shorten production cycle, and contribute to economic diversification.

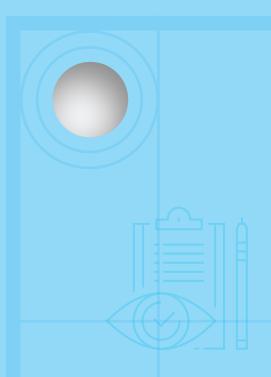


推出「中小企好幫手」流動應用程式,讓中小企能隨時隨地掌握資助計劃詳情及生產力局的活動及服務資訊。

Launched the "SME Biz Easy" mobile application to facilitate SMEs in identifying funding schemes, as well as getting latest information on HKPC's services anytime, anywhere.





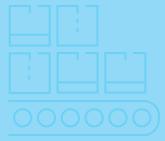


reNEW

「再工業化」並非要將勞動密集的生產工序搬回 香港,而是要善用先進及智能化的科技,再創造 香港工商業的競爭優勢。

"Re-industrialization" in Hong Kong is not meant to bring back labour-intensive manufacturing. Instead, it is a mission to renew the competitive advantages of Hong Kong industry through the best use of advanced and smart technologies.







再創造 reNEW



著名電影演員陳寶珠毋庸置疑是六十年代香港人的偶像,她的一首「工廠妹萬歲」,不單打動了一代人的心,更描繪出逾半世紀工業帶動香港經濟繁榮的輝煌成就。

Legendary movie star Connie Chan Po-chu was one of the Hong Kong icons in the 1960s, her all-time favourite hit "Hurray Factory Girls!" captured the hearts of local community. In a way, it depicts the success of Hong Kong's industrialization in driving the economic development of the city for more than fifty years.

近年,因應珠三角經營環境的改變,特別是勞動力成本上升和勞工短缺,香港製造商正考慮 將生產線回流。根據生產力局的初步調查,藥品和醫療、食品、精密金屬製品和模具、鐘錶 及珠寶為其中五個最大機會將生產線回流香港的製造業。但是,那些有意將生產線從珠三角 回流香港的廠商,亦同樣要面對勞工短缺和勞工成本高等挑戰。

In recent years, due to changes in operating environment in the Pearl River Delta (PRD) especially the rising labour cost and shortage of manpower, Hong Kong manufacturers are considering relocating their operations back to Hong Kong. According to a preliminary survey by HKPC, the pharmaceuticals and medicinal, food products, precision fabricated metal products and tooling, watches and clocks and jewellery are among the five manufacturing sectors with greater intention for relocation. However, for those who wish to relocate production back to Hong Kong, their challenges much resemble the ones facing manufacturers in the PRD, mainly manpower shortage and high labour costs.





五大回流挑戰 5 Challenges of Relocation



勞工短缺 Manpower Shortage



環保法規 Environmental Regulations



配件和連繫工業服務 Components & Linkage Industry Sevices



行政長官在今年的施政報告中肯定「再工業化」 的重要性,並確定高增值科技工業和智能生產 為具經濟發展潛力之方向。

Instead of relocation, we need to renew the strength of our industry.

In this year's Policy Address, the Chief Executive has identified "re-industrialization" as a potential area of economic growth for Hong Kong through the development of high value-added technology industry and intelligent production.



勞動成本高 High Labour Costs



合適設廠地點 Suitable Factories Premises



捲土重來

We'll be back

生產力局與香港工業專業評審局合作進行工業回流的廣泛調查研究, 旨在找出可行的營運和商業模式,為中小企制定策略和回流路線圖提 供全面參考:

In collaboration with the Professional Validation Council of Hong Kong Industries, HKPC has been conducting a comprehensive study to figure out feasible operational and business models for relocation. It will provide a comprehensive reference for SMEs to define their strategies and roadmap of relocation through:

15

家在香港有生產運作的 廠商實地調查

on-site benchmarking studies of manufacturers with operations in Hong Kong **50**

個擬回流的 工業家訪問

interviews with industrialists interested in relocation 本附有詳細個案分析和 支援服務的回流指引

detailed relocation guide with case studies and support services

5

個行業經驗分享會 sector specific experience sharing seminars 1

個本地製造業材料及 連繫工業支援供應商 網上資料庫

electronic database of local linkage industry components and services suppliers





何謂工業 4.0? What is i4.0?

工業 4.0 是無縫地連繫企業內外價值鏈上的人、物件和機器,讓其相互溝通和協調,生產和業務流程更精益和快速,得以生產高客製化的產品,價值鏈上收集的大量數據,可藉此發展智能產品和服務。

The essence of Industry 4.0 (i4.0) is the seamless connectivity of people, things and machines along the value chain beyond a single company, it allows all production elements to communicate and coordinate with each other, enabling leaner, faster production and business processes for producing highly customized goods, as large amount of data are collected and generated along the value chain, making possible the development of smart products and services.





第四次工業革命 The Fourth Revolution

工業 4.0 概念由德國政府提出,為香港再工業化提供了策略方向,自德國 採納工業 4.0 作為經濟增長策略後,其他工業國亦紛紛推行類似計劃。

The Industry 4.0 (i4.0) concept spearheaded by the German government offers a strategic direction for the reindustrialization of Hong Kong. Ever since the German government adopted i4.0 as a high-tech strategy to sustain economic growth, other industrialized countries have followed suit and launched similar initiatives.

國務院於 2015 年三月正式提出「中國製造 2025」,亦稱之為中國版的工業 4.0,標誌著國家開展大規模改革及推動製造行業升級。

In March 2015, the State Council formally adopted the "Made in China 2025", dubbed the Chinese i4.0, marking China's full-scale attempt to revamp and upgrade its manufacturing sector.

當愈來愈多海外顧客將其生產工序融入無縫數碼鏈,假如香港製造商仍遲疑不決,便有機會喪失在全球供應鏈上的競爭力。

With more and more overseas customers about to integrate their operations into a seamless digital chain, if Hong Kong manufacturers still take a wait and see attitude, they may fall behind and lose their foothold on this new global supply chain.







過去接近五十年來,生產力局在香港工業發展 扮演中堅角色。

For almost fifty years, HKPC has been an agent of change throughout the development of Hong Kong industry.

「工業 4.0」關係重大,在廣泛行業商會的支 持下,生產力局開展全面「工業 4.0」推廣計 劃,讓本地企業可掌握推行「工業 4.0」和「中 國製造 2025」的重要技術要求。

In view of the significance of i4.0, with extensive support from trade associations and organizations, HKPC has launched a comprehensive i4.0 industry promotion initiative to equip Hong Kong enterprises with essential knowledge on the key components and technological requirements for adopting i4.0 and "Made in China 2025".

推廣計劃包括在香港舉行雲集海外頂尖專家 的「工業 4.0」國際會議,設立智能產業廊 示範未來工廠,以及獲德國 IPT Fraunhofer Institute 認可的「工業 4.0」業界培訓課程。

The Programme comprises an International Conference on Industry 4.0 in Hong Kong; a "Smart Industry One" demonstration centre showcasing the future factory as well as certified i4.0 industry practitioner training course certified by the IPT Fraunhofer Institute of Germany.



Steam Machines

i1.0

Electric Power Driving Mass Production



電子自動化 **Electronics Automation**

i3.0



虚實合一 智能產品/服務 Cyber-physical Smart Product/ Service







從 2.0 到 4.0 From 2.0 to 4.0



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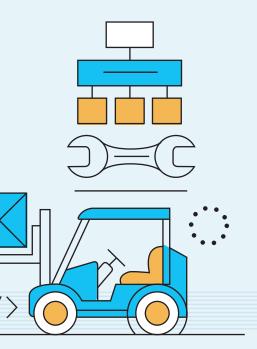
問題 Problem

全球工業買家已開始將工業 4.0 元素加入採購指引或訂單條款,若不能達到要求將會影響香港廠商在國際市場的競爭優勢。

Global industrial buyers have started to incorporate i4.0 elements into their procurement guidelines or as contractual binding requirements. Failure to comply may impair the competitiveness of Hong Kong manufacturers on the international market.









解決方案 Solution

生活力局協助一家本地玩具廠商發展邁向工業 4.0 的全面策略路線圖,並協助廠商的管理層認識工業 4.0 的前景和技術要求,從而制訂一系列推行工業 4.0 的先導項目計劃。

HKPC assists a local toy manufacturer to develop a holistic strategic roadmap towards i4.0. HKPC assists the manufacturer's top management to understand the vision, and technical requirements of Industry 4.0. The client identified and prioritized a series of i4.0 pilot projects.

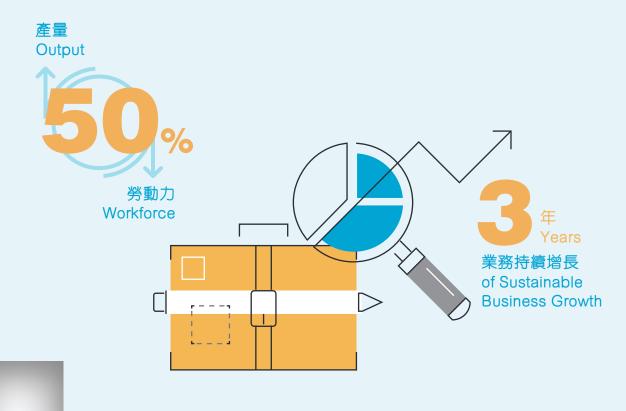


工業價值

Value to the Industry

預計在推行項目後,客戶可增加 50% 產量,和減少 50% 勞動力。客戶更可開展智能產品和服務的全新業務模式,令未來三年業務可持續增長。

It is foreseen that, upon completion of the project, the client will increase its output by 50% and reduce workforce by more than 50%. The development of smart products and smart services will also enable completely new business models in coming three years for sustainable business growth.



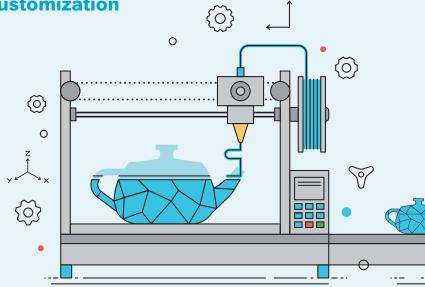




3D 打印及大量客製化 3D Printing & Mass Customization

實現工業 4.0,有賴利用先進技術以更 精細、更快和更靈活地生產配件和客 製化產品。

One of the key enablers of i4.0 is advanced manufacturing technology that can produce components and customized products with higher precision, shorter turnaround time and more flexibility.



3D 打印機預示未來工業生產的面貌,3D 打印初期主要用於製造展示用途的首辦,因此被稱為快速原型,但是技術的急速發展,現已可生產多種物料的耐用和實用的配件。

3D printers give us a glimpse of the future model of production. 3D printing was at first described as "rapid prototyping" because it was first used for creating models for illustrative purpose but recent advancement in technologies has allowed the production of lasting and functional components with a variety of materials.

為進一步普及推廣有關科技,生產力局成立全港首個提供一條龍 3D 打印顧問服務的支援中心 — 「3D 打印體驗廊」,讓不同行業的工商企業、專業人士、學生以至社會大眾,親身體驗 3D 打印的整個過程。

To promote awareness and adoption of 3D printing technology to different sectors, HKPC opened the first one-stop 3D printing support centre in Hong Kong – "3D Printing One ", to offer an end-to-end 3D printing experience under one roof.

話當年 Flash Back

二十多年前,生產力局已率先在港推動應用 3D 打印技術。生產力局在1995年6月成立「快速原型中心」,是亞洲首家同類型的中心,現在生產力局平均每年推行超過 400項 3D 打印項目。

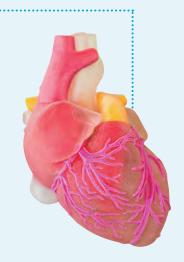
In Hong Kong, HKPC is a pioneer in the adoption of 3D printing technology for the past two decades. HKPC established the Rapid Prototyping Technology Centre in June 1995, which is the first of its kind in Asia. Now, HKPC is delivering over 400 3D printing projects per year.





「3D 打印體驗廊」設有由入門級至專業級的 3D 打印機,可打印多物料、多色彩的物件,精密度由 0.5 毫米至 0.014 毫米。

"3D Printing One" features 3D printers from elementary to professional levels, supporting multi-material and multi-colour printing, with resolution ranging from 0.5mm to 0.014mm.









Mr CY Leung, Chief Executive of the HKSAR, officiated at the opening of the "3D Printing One" and demonstrated this latest technology to the public.

「3D 打印體驗廊」軟硬設備齊全,專家經驗豐富,讓各 界可以運用這革命性的科技,活現出創新的意念,推動香 港的創新文化。

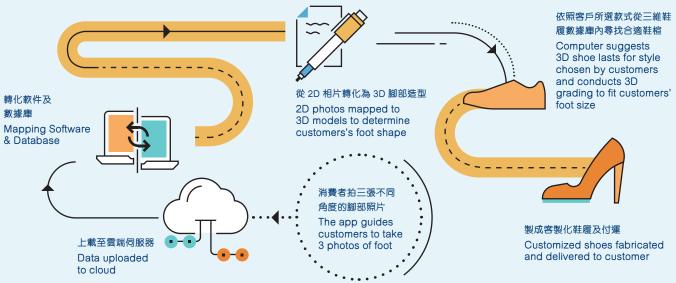
"3D Printing One " houses a comprehensive spectrum of software and hardware, with a wealth of 3D printing experts and solid experience in technology application, it enables visitors to use this revolutionary technology to give life to their creative ideas, fostering a culture of innovation in Hong Kong.







試鞋買鞋一 APP 通 One App Fits All





問題 Problem

現時,消費者已可以在網上買鞋,但是由於足部尺碼標準不同,消費者經常覺得所購買的鞋履,就算尺碼正確,但鞋履始終不能貼合腳形,帶來不少額外的付運、退款和行政費用。

Nowadays, customers can buy shoes from online store, yet, due to differences in foot measurement standards, customers often find the purchased item not fitting their feet well even with designated size chosen. This incurred unnecessary extra costs resulting from reshipment and refunding.



解決方案 Solution

生產力局開發的嶄新虛擬鞋履製造方法,運用智能手機應用程式、 繪圖軟件和數據庫。消費者只需要在手機應用程式的指導下,為自

HKPC is developing a new methodology for virtual shoes fitting utilizing a mobile app, mapping software and database. Customers just need to take three photos of their feet guided by the mobile app, the photos taken will then be uploaded to the mapping software system for matching the suitable 3D foot models to simulate actual fitting.

己的腳部拍攝三張照片。相片將會上載至伺服器的軟件系統,轉化



工業價值 Value to the Industry

成客戶的 3D 腳部造型,模擬真實的試鞋過程。

將鞋尺碼對比鞋楦知識資料庫,製造商可以選擇最適合 鞋楦,製造客製化的鞋履,特別可照顧左右腳尺碼和腳 形不同的顧客需要,大大提升消費者在網上買鞋的體驗。

By comparing the foot measurements to the "shoe last" knowledge database (a shoe last is a foot-shaped form used by shoemakers to shape shoes), manufacturer can choose the most suitable "last" for personalized footwear production, especially those with uneven foot shape and size. With a convenient application for shoes fitting, customer's experience in buying shoes online will be much enhanced.









獨家牛仔褲 MY pair of jeans





問題 Problem

現時,客製化配有多項裝飾效果的產品成紡織業的市場趨勢。市場上,一般以兩項方法製造客製化裝飾效果,如將鐳射雕刻、絲網或數碼印花加在牛仔褲上,但是,鐳射雕刻只可製造單色圖案效果,而單件絲網和數碼印花的生產成本高昂,在裝飾工序之應用有限。

Nowadays, the market trend of the textile industry is towards customized products with a variety of decorative finishing features. There are two common methods to decorate denim jeans with customized patterns: laser engraving and screen or digital printing. However, laser engraving can create single colour pattern only while the high unit cost of screen printing and digital printing limit their extensive use in the decorating process.



解決方案 Solution

生產力局為成衣機械廠商開發了鐳射雕刻機,此機可利用鐳射雕刻技術為牛仔褲設計獨特的顏色和仿手製圖案,是極具成本效益的多配飾牛仔褲客製化方案。 多顏色鐳射雕刻技術的原理是將預先在牛仔布層塗上的熱固油墨蒸發,形成褲上的顏色圖案。

HKPC developed a laser engraving machine for a client specialized in garment machinery. The machine can decorate denim clothings with unique colour through vaporizing a pre-applied layer of plastisol colour ink on the fabric, by making use of a control algorithm to create randomized features, the machine is also capable of imitating handmade pattern, thus offering a cost effective solution for producing customized denim products.



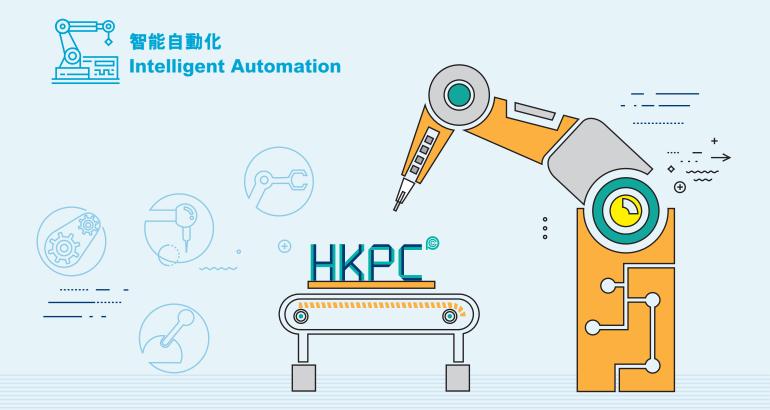
工業價值 Value to the Industry

用家可以將自己的牛仔褲裝飾成獨特的設計,香港時裝設計師和生產商可藉此製作客製化的產品。

It allows users to decorate jeans with their own designed and unique features. Local fashion designers and manufacturers can also leverage on this solution to produce high value-added customized products.









工業 4.0 的其中一項特徵是自主生產, 能自主完成工作的智能機器人,將成為 工業 4.0 營運模式的重要部分。

One of the essential features of i4.0 is autonomous production. Intelligent robots that can complete tasks with minimal human input will play a key part in the i4.0 model.











智能機器人近年發展迅速,應用愈趨廣泛。為協助香港企業運用智能自動化技術,提升效率及競爭優勢,生產力局成立全港首個「智能機器人中心」,提供一站式應用技術支援,集顧問服務、技術示範、應用方案開發及培訓於一身。

The rapid development of industrial robots has triggered more diversified applications. To enable enterprises to reap the benefits of the advancement in intelligent robots, during the year, HKPC opened a new support centre, "RoboticsOne", to offer consultancy service, technology demonstration, robotics solutions development and training under one roof.

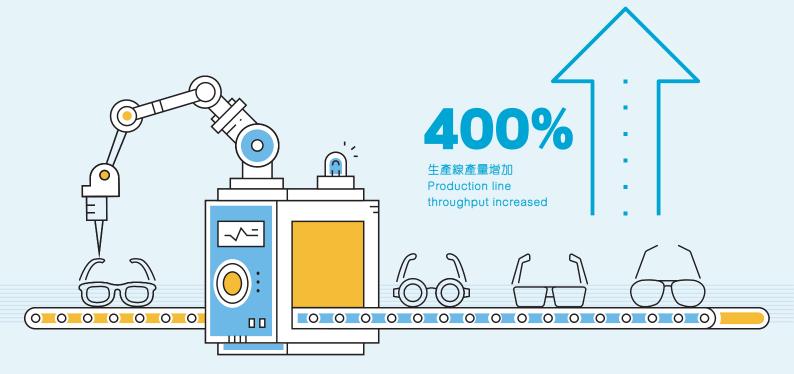
「智能機器人中心」設有多項機器人應用示範,並以鐘 錶業、內衣業等作為試點,向本地工業界展示智能機器 人應用在三維打磨拋光和激光切割的實際運作,以及電 腦視覺和人工智能在自動化生產中的應用。

With the watch and the intimate apparel industries as pilot users, "RoboticsOne" features various applications of intelligent robots, including 3D grinding and polishing, 3D laser cutting, as well as the application of intelligent vision and artificial intelligence in automated production.





亮麗眼鏡 Spectacular Spectacles



金屬眼鏡架對廠商及消費者都是較高價及高增值的產品。然而,眼鏡架的金屬物料大部份都需要經過電鍍處理,以達到裝潢及防腐蝕的效果。傳統的眼鏡架電鍍工序,僅屬於半自動化。生產力局憑藉豐富的工業表面處理應用經驗,為眼鏡架廠商引進了全自動電鍍生產線。廠商採用全新的自動化電鍍系統後,生產線的產量增加了4倍以上,並有助降低人力需求及物料損耗。

Metal spectacle frames are usually more expensive and have become synonymous as a high-quality, value-added product for both manufacturers and consumers. However, most metals used for spectacle frame require electroplating for both decorative purpose and corrosion protection. Traditionally, electroplating process for spectacle frame is only semi-automated. HKPC introduced a fully automated plating process to a spectacle frame manufacturer banking on its extensive experience in surface finishing from other industries. The client adopted the new electroplating process in their new automatic electroplating system, throughput of the production line increased by at least 4 times, with less manpower and materials wastage.











自動化解人手緊絀 Labour Crunch Bites



人手短缺長期困擾餐飲業,為應對挑戰, 食肆必須引進自動化技術提高生產力。香港大多數食肆在餐飲服務自動化方面仍處 於起步階段,部份大型飲食集團採用自動 炒菜機、自助點菜系統等紓緩人手短缺的 壓力。

Manpower shortage is taking a bite of the restaurant sector. To cope with the challenge, restaurants have to adopt automation technology to enhance their productivity. However, in Hong Kong, automation of catering services is still at their infant stage for most operators except the large catering groups which have adopted automatic frying machine and digital restaurant menu to relieve the shortage of manpower.

生產力局與香港餐飲聯業協會合作推行一項支援計劃,增強餐飲業對各類前線及廚房自動化技術的認知,協助紓緩人手短缺壓力的問題。

Collaborating with the Hong Kong Federation of Restaurants and Related Trades Limited (HKFORT), HKPC has been implementing a project to enhance the awareness of SMEs in the restaurant sector to adopt various frontline and kitchen automation technology to ease their manpower shortage problem.

計劃活動包括一系列食肆自動化技術研討會,推廣各類針對廚房及前線運作的高效益自動化技術。生產力局正走訪食肆,了解業界採用自動化技術的條件,以編製一本餐飲業自動化實用指南,內容包括自我評估清單,讓食肆了解自己應用自動化技術的可行性,以及選擇和推行相關技術的建議。

Through organizing restaurant automation technology seminars, a wide range of cost effective solutions are promoted to the industry. HKPC has been conducting a survey to develop a practical guide with a self-assessment checklist for the industry to examine readiness of adopting relevant technology as well as providing tips of selection and implementation.









高增值製造 High Value Added Manufacturing

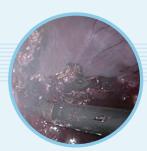
香港土地及勞工市場資源有限,再工業化對香港而言,並非要把勞工密集的 組裝線回流,而是由創新及科技帶動,發展高增值的工序及行業。

Given the limited land and manpower resources in Hong Kong, instead of relocating the labour intensive assembly lines back here, Hong Kong's reindustrialization needs to be based on high value-added processes or industry sectors driven by innovation and technology.



看清楚 See Inside







後 After

前 Before

腹腔鏡手術是微創手術的一種。腹腔鏡手術進行期間,電手術工具會導致煙霧產生,阻礙醫生的視線,往往需要從人體腹腔取出腹腔鏡,沖洗後,才可繼續進行手術,可能降低手術效率及質素。

Laparoscopic surgery is a type of minimally invasive surgery. However, the application of electrosurgical units will generate surgical smoke that obstructs the view of surgeons; the laparoscope might need to be removed from human abdominal cavity for rinsing before resuming surgery, reducing the efficiency and quality of surgical operation.





在創新及科技基金的支持下,生產力局與香港中文大學賽馬會微創醫療技術培訓中心合作開創一套驅散腹腔鏡手術煙霧的系統,讓腹腔鏡保持清晰,毋須再於手術期間取出腹腔鏡沖洗。

Supported by the ITF and the CUHK Jockey Club Minimally Invasive Surgical Skills Centre, HKPC successfully developed a surgical smoke evacuation solution, which could help maintain a clear laparoscopic vision and eliminate the undesired pulling out of laparoscope for rinsing during the surgery process.

系統適合在手術中使用,而且可安裝在現有的微創手術工具,使用方便。這創新設計的功能原型已通過臨床前試驗,驗證了設計的有效性。

The tool is user friendly and complements existing laparoscopic surgical instruments to evacuate surgical smoke from the tip of the instrument. Pre-clinical test on the prototype confirmed the effectiveness of this novel design.

生產力局醫療器材創新服務 HKPC's Capabilities for Medical Device Innovation

- 3D CAD/CAM 設計
- 流體動力學分析
 Computational fluid
 dynamics analysis
- 3D 打印 3D Printing
- 超精密加工技術 Ultra-precision fabrication
- 醫療器材監管及法規 Medical device regulations and compliance
- 知識產權及專利申請
 IP and Patent



透過這研發項目所累積的技術知識及經驗,本局的團隊可協助醫療器材行業及相關工業,把業務擴展至高增值的外科用品。

With the know-how and experience accumulated through this R&D project, HKPC can assist the medical device sector and related industries to expand their business into high value-added surgical products.





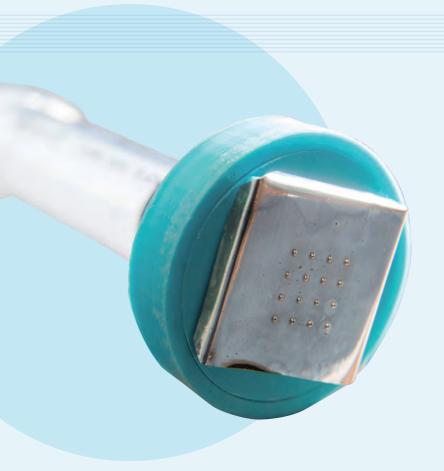


無痛打針 **No Pain Injection**

生產力局成功開發以微電鑄技術生產低成本金屬空 心微針,這種注射方式可望減輕患者長期注射所帶 來的痛楚。

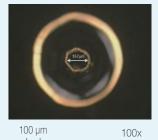
HKPC has successfully developed a low cost method based on electroforming to manufacture metallic hollow micro-needle which will relieve patients from the pain of regular injections.





針孔直徑: Diameter of needle hole:

人的頭髮平均直徑 約為 0.12 毫米。 Average diameter of human hair is around 0.12 mm.





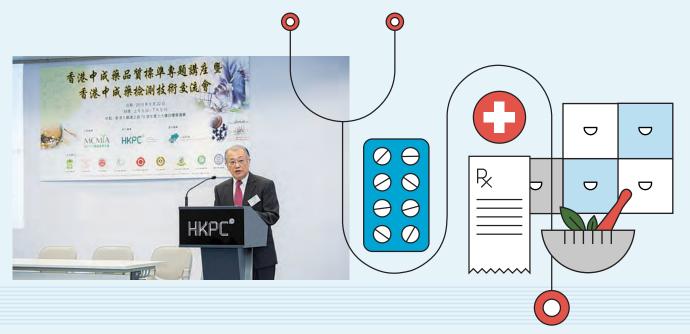
100x











作為中西醫藥交流的搖籃, 中藥是香港實現再工業化其中 一個極具發展潛力的行業。

Against the backdrop of re-industrialization in Hong Kong, the Chinese medicine industry is one which enjoys clear advantages as Hong Kong is a place where Eastern and Western medicines converge.

良好生產規範及測試對於香港中成藥行業的現代化發展極為重要。

Good Manufacturing Practice (GMP) and Testing are important to the successful development of Chinese medicine industry in Hong Kong.

為加強本地傳統中成藥生產商符合最新藥品生產管理和質量控制規範,以及鞏固中藥業界對中成藥品質及安全檢測方法的能力,生產力局聯同行業商會獲得「中小企業發展支援基金」的撥款資助,現正開展兩個培訓課程及認知推廣項目,加強業界對中成藥品質及安全檢測方法和技術的認知。

To strengthen the local traditional Chinese medicine manufacturers in meeting the latest GMP requirements as well as strengthening the local trade's capability in product quality and safety testing, supported by the SME Development Fund (SDF), HKPC has been collaborating with trade associations to conduct two training and awareness programmes on GMP as well as product quality and safety testing.

項目包括有關藥品生產質量管理規範的講座和超過70個培訓課程,以及有關中成藥檢測技術,並編製參考指南和建立虛擬的藥物規範製造的資源網站,以供業界分享知識及最佳範例。

These two projects included seminars and more than 70 training courses on various aspects of GMP and testing technologies for proprietary Chinese medicines. Guide books and a web-based industry resource sharing platform will also be produced to share knowledge and best practices.



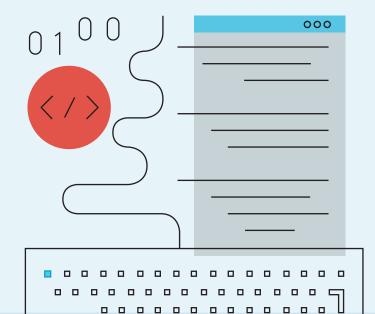




保持軟件質量 Culturing Software Quality

我們愈來愈倚賴以資訊科技執行各種業務操作,但 軟件錯誤可造成災難性和無法挽回的後果。軟件質 量變得極為重要,因此獨立的軟件測試便成為控制 軟件質量的必要手段。

With our growing reliance on IT applications to perform an ever-increasing variety of business operation tasks, the cost of software failures could be catastrophic. Software quality is hence of paramount importance, and so is independent software testing that is an indispensable means in controlling software quality.





一家公營機構現正為未來兩年發展超過 10 個應用系統,基於系統的規模和複雜性,必須確保系統的穩定性和資訊保安。

A public organization is developing more than 10 application systems. In view of the scale and complexity of these systems, their stability and security are of utmost concern.

香港軟件檢測和認證中心獲該機構委託,訂立品質管理架構,為以上的項目管理驗收程序,所得的經驗有助推廣本港的獨立軟件品質保證服務。

The Hong Kong Software Testing and Certification Centre (HKSTCC) was commissioned by that organization to set up a "quality governance framework" and manage the acceptance process of these implementation projects. The experience gained in this project will be very valuable to promoting independent software quality assurance service in Hong Kong.



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智能物流 Smart Logistics

智能物流是工業 4.0 模式的核心組成部分,以人手收集和整理物流訊息將逐步以傳感器、無線射頻識別 (RFID) 標籤及供應鏈上的裝置自動產生,減少人手追蹤和監控。

Smart Logistics is a key component of the Industry 4.0 model. Logistics information that was manually compiled will increasingly be generated by sensors, Radio Frequency Identification (RFID) tags and all sorts of devices on the supply chain, relying less on labour-based tracking and monitoring.

生產力局成功開發出多種智能方案,可提升香港物流基礎設施運作的 效率及安全。

HKPC has successfully developed a number of smart technologies to enhance the efficiency and safety of the daily operations of Hong Kong's logistics infrastructure.

處理行李是全球機場的重要工作。機場使用 RFID 處理行李時,有機會出現「誤讀」問題,即是當行李仍在輸送帶時便已讀取行李標籤,因此錯誤指示行李已運載到航空貨箱中。主要原因是貨箱仍在運送過程時,RFID 訊號被貨箱的金屬外牆多次反射,發出不清晰的指示,因此工作人員需要用人手再核實。

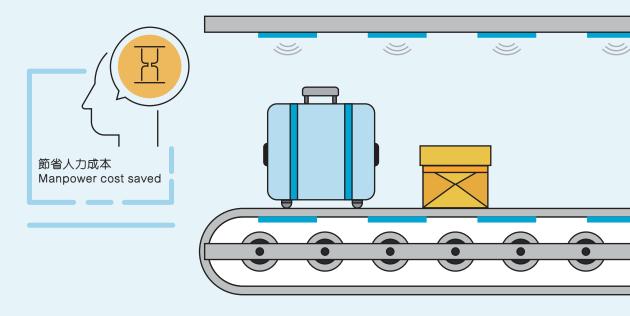
Baggage handling is a major operation of airports worldwide. RFID technology-based baggage handling system is often affected by a situation called "belt-read". It happens when a bag tag is wrongly read by the read-point as "loaded" into the container while the bag is still on the conveyor belt. It is mainly caused by multiple reflections of RFID signals by the metal walls of the container. Baggage system operator needs to carry out additional verification by manual scanning, resulting in wastage in resources.

傳統上,RFID 系統設計師製造金屬外殼制約電磁波,以避免電磁波洩漏。這些金屬外殼利用其物理特性反射和吸收額外的電磁波,從而避免讀取標籤時出現超出範圍的情況。但安裝這種防護外殼需要大量的空間,妨礙了行李的輸送運作。

Traditionally, the RFID system designer uses metallic housing to confine the radio-wave to avoid "radio-wave leakage", but it requires a lot of space for the installation and limits the operation flows because of physical constraints.

生產力局開發出「智能無線射頻識別功能限制系統」, 透過發出阻隔訊號,令行李輸送帶上的 RFID 標籤暫 時失去功能,這個系統就如一個無形的屏蔽,一旦 離開該系統後,RFID 標籤便會回復正常運作。對於 RFID 行業來説,該系統是全新的解決方法,生產力局 更獲得此技術的專利。該系統可節省大量人力成本。

To address the RFID "belt-read" problem, HKPC developed an Intelligent RFID Activity Confiner (IRAC) system, using jamming signal to suppress the RFID-tags while they are still on top of the conveyor belt, RFID tags will resume normal function once they are outside the "exposure" of IRAC signal. This approach is totally new to RFID industry and HKPC is granted a patent on this technology which can effectively solve the "belt-read" issue faced by airport operators and can save significant manpower cost.

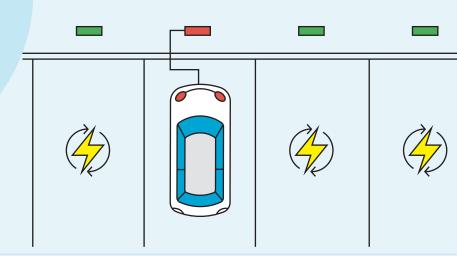




再創造 reNEW

香港機場管理局(機管局)在使用電動車上擔當 重要角色。目前,在香港國際機場內的30家營 運公司擁有308輛電動車,包括:房車、客貨 車和電動地勤支援設備,以及多達200個標準 充電點。

Airport Authority Hong Kong (AA) is a key player in Electric Vehicles adoption. Currently, there are 308 EV operated by more than 30 airport operating companies, including sedans, vans and Electric Ground Service Equipment (EGSE), and more than 200 standard charging bays in the Hong Kong International Airport (HKIA).

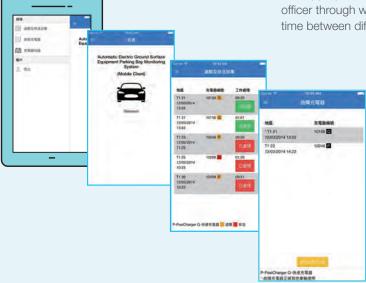


現時,機管局以人手監控泊車位,面對充電點和基礎設施的管理問題,例如,泊車位被非電動車佔用,以及未能即時知道失效的充電站等。

AA monitors the parking bays manually and has been encountering various management problems of the charging bays and the infrastructure, for example, parking bays being occupied by non-EVs and late alert of failed chargers.

在創新及科技基金資助下,生產力局開發自動化電動地勤車輛泊位監察系統,結合圖像識別技術,監測泊車位的使用情況,以及實時監控充電站的狀況和預計餘下的充電時間。任何不尋常的情況下,例如不適當泊車或充電站失效等所發出的通知,都會通過網頁及流動應用程式傳送至工作人員,省卻往來充電設施的時間。

Supported by the Innovation and Technology Fund, HKPC developed an automatic EGSE Parking Bay Monitoring System integrated with image recognition technology to detect the occupancy of parking bay and provide real-time monitoring for the charger status and estimation of remaining charging time. Notification of any unusual status, such as inappropriate parking or malfunction of chargers, will be sent to the officer through web and mobile applications for saving the travelling time between different charging facilities.







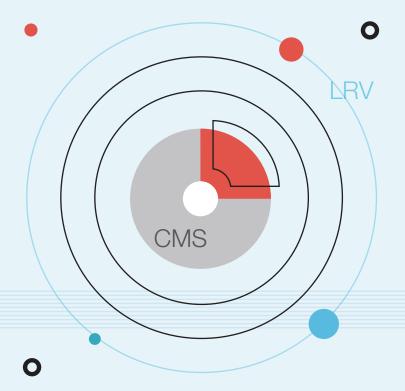


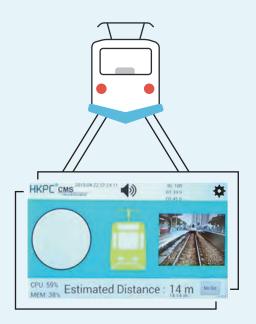
借助這系統,工作人員就不需定期到每個充電站收集數據。取而代之,他們可通過手機和網頁應用程式收集數據,以及查閱充電站狀況報告。該系統每月可節省超過 120 個工時,以及提升電動車充電設施的使用率。

With the help of the system, airport staff will not be required to conduct data collection of the chargers site by site regularly. Instead, they can collect data from the charger and acquire status report via mobile and web application, saving over 120 man-hours per month for operation and enhancing the utilization of charging facilities.









生產力局成功應用視覺處理技術, 開發出可以偵測輕鐵列車的系統。 HKPC has successfully developed a customized vision processing system for detecting light rail rehicles.

生產力局開發了近距監控系統,這是度身訂造的精密數學運算法,可辨識近距離前方輕鐵,減少列車碰撞風險。該系統可追蹤前方2至40米的輕鐵列車,並向車長發出防撞預警。

Developed by HKPC, the Close-up Monitoring System (CMS) is a sophisticated, tailor-made algorithm to recognize the close-up to preceding light rail vehicles. It can track any preceding LRV from 40 meters to 2 meters away and alerts train drivers when train vehicle in front is too close.

該系統使用低成本的流動通訊裝置,相比 傳統的訊號系統,該系統節省了龐大的建 造費用。

By using this low cost mobile device, CMS can save millions of dollars in the construction cost of traditional signaling system.

該項目榮獲國際工程技術學會 (IET) 頒發 2015 創新應用獎「高度讚賞」的殊榮。

The project was awarded "Highly Commended" in the "The Institution of Engineering and Technology (IET) Innovation Awards 2015".







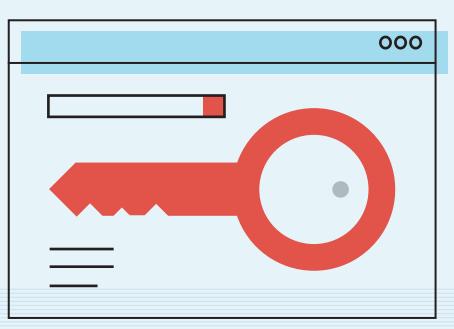




工業 4.0 網絡安全任重道遠 Revolution Requires Security

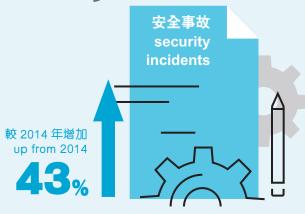
在工業 4.0 的年代,四週的事物都邁向智能化,雖帶來 莫大便利和效益,但也衍生 不少網絡保安挑戰。

The Industry 4.0 era certainly brings us unlimited convenience and efficiency, but it also poses hidden threats on cyber-security.



香港電腦保安事故協調中心處理 HKCERT handled

4,928



生產力局轄下的香港電腦保安事故協調中心,一直致 力擔當協調和回應資訊保安事故的樞紐。

Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT), which operates under the auspices of HKPC, has been acting as a communication hub for information security incident response.

在 2015 年,協調中心共處理 4,928 宗保安事故,較上一年增加 43%。協調中心正密切注視嵌入式系統或「物聯網」所引起的新威脅,並透過宣傳推廣、嵌入式系統保安培訓及物聯網風險評估顧問服務,以應對挑戰。

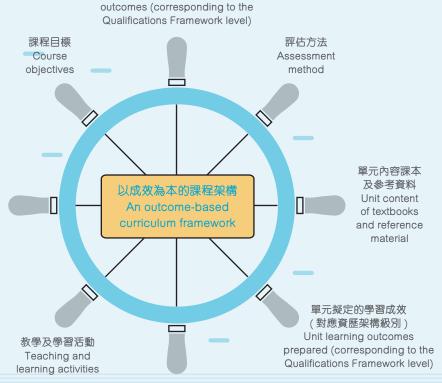
In 2015, HKCERT handled 4,928 security incidents, up 43% from 2014. HKCERT is closely monitoring the emerging threats of networked embedded systems or the "Internet of things" (IoT) and is developing solutions to address them through awareness promotion, training on embedded system security and consultancy on IoT risk assessment.



y ↓ ↓ 人才發展 → △ ← Developing ¬ ↑ 「 Talent for Growth

為了支援政府促進終身學習及持續人才發展,生產力局一直積極參與「資歷架構」 計劃。「資歷架構」在支援職業教育發展 方面擔當重要角色。

In support of the government's initiative to promote life-long learning and sustainable manpower development, HKPC has been actively involved in the Qualifications Framework (QF) initiatives. QF plays an important role in underpinning the development of vocational education alongside academic and continuing education.



課程擬定的學習成效 (對應資歷架構級別) Develop curriculum learning

生產力局的「生產力培訓學院」已通過資歷架構第五級別的認證,現正提供「資歷架構」認可的專業證書課程。

The Productivity Training Institute (PTI) of HKPC has obtained the accreditation of QF Level 5 and is currently offering QF-recognized professional certificate programmes.

憑藉本局與行業協會和專業團體全面的聯繫,生產力局與業界合作編訂了製造 科技業(模具、金屬及塑膠)的《能力標準説明》,作為「資歷架構」第五級 培訓課程的基礎,支持業界在升級轉型的路上,對人力資本發展的需求。

With our extensive connection with trade associations and professional bodies, HKPC partnered with the industry to produce the Specification of Competency Standards (SCS) for Manufacturing Technology (Tooling, Metals and Plastics) Industry, providing the foundation for QF level 5 training programmes to support the human capital development needs for the upgrading and transformation of industries.

此外,生產力局更提供「資歷架構」顧問服務,幫助企業把內部員工發展計劃,提升至「資歷架構」認可的水平。

Besides, HKPC also offers QF consultancy services to help enterprises upgrade their in-house staff development programmes to QF recognized level.

「製程開發及管理專業證書」課程為金屬衝壓業從業員,提供有關製程設計及 開發、自動化系統開發、生產及製程管理的專業培訓,教授相關知識及技巧。

The "Professional Certificate of Manufacturing Process Development and Management" programme provides learners with the knowledge and skills in design and planning of production process and automation systems as well as managing the know-how and knowledge on manufacturing process for metal stamping industry.





憑藉與創意產業及製造業的聯繫,生產力局在創意香港的資助下,與不同的行業協會推行了以下項目,藉以培育創意產業人才,以及支援行內初創企業的發展。

Leveraging on HKPC's connection with the creative and manufacturing industry and with funding support from CreateHK, HKPC collaborated with trade associations on the following projects to develop creative talents and support the business development of start-ups in the creative industry sectors.





由香港數碼娛樂協會主辦、生產力局擔任執行機構的 第四屆香港漫畫研習營,為約60位參加者提供漫畫創 作的實用技巧、各地區的市場知識,促進粵、港、澳、 台四地年青漫畫家的文化交流。

The 4th Hong Kong Comic Camp, organized by Hong Kong Digital Entertainment Association (HKDEA) and implemented by HKPC provided training for around 60 participants with practical skills in comics creation and knowledge of the regional market as well as to promote cultural exchange among the young talents in the comics industry of Hong Kong, Guangdong, Macau, and Taiwan.

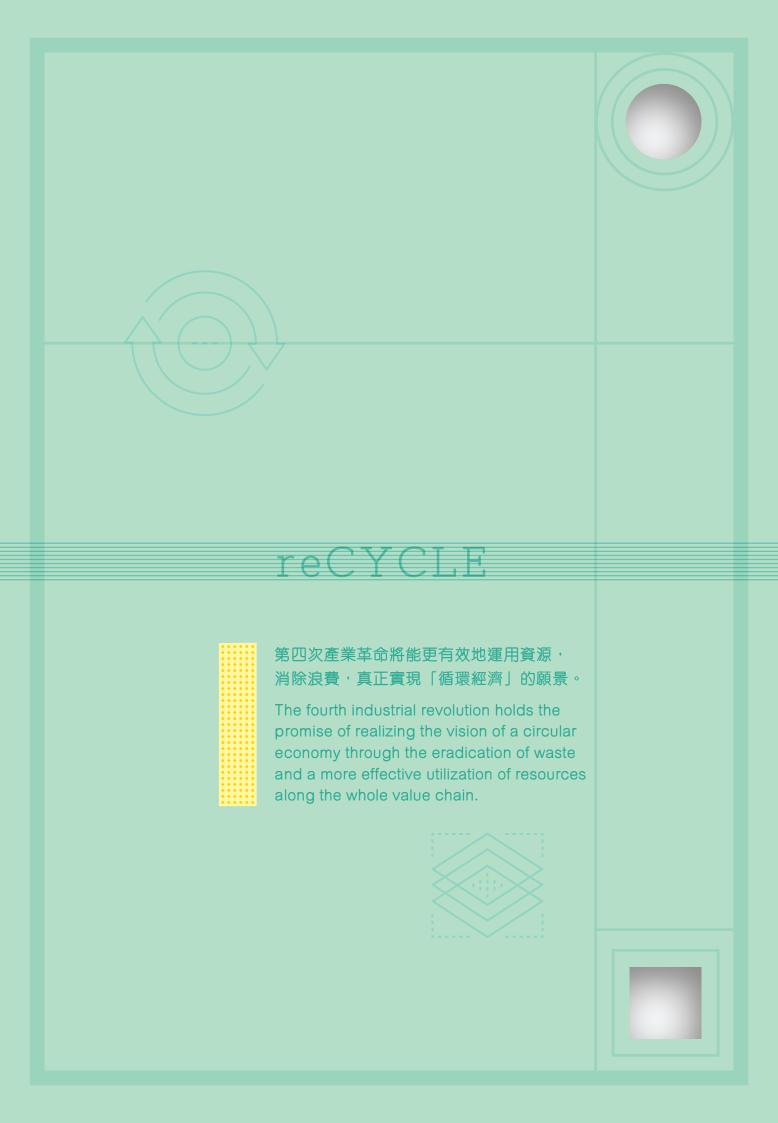
生產力局與香港數碼娛樂協會再度合作,舉辦第三屆動畫支援計劃,為 15 家新晉及小型動畫企業,提供資助、師友嚮導及技術培訓,以培育動畫人才,製作原創動畫。作品將參與本地和區內的展覽及比賽,例如「香港國際影視展 2016」(FILMART 2016),推廣本地原創動畫,為初創及中小企業締造更多商機。

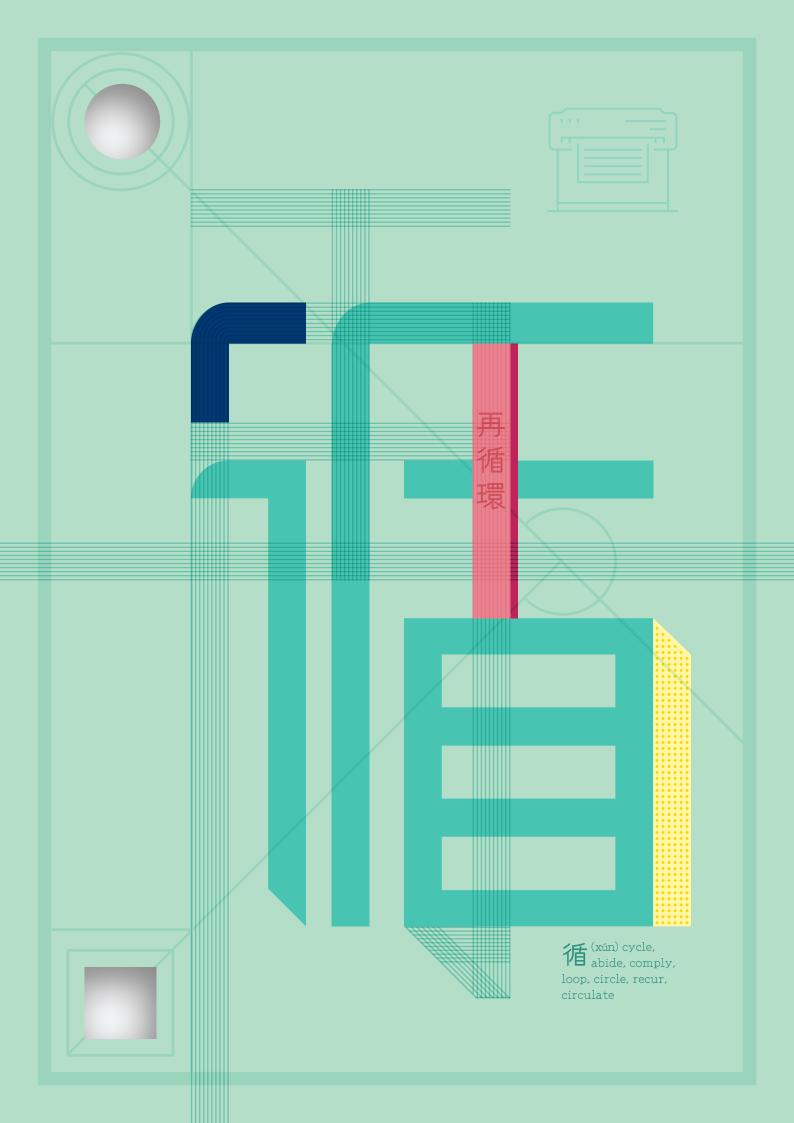
Collaborating with HKDEA again, HKPC implemented the 3rd Animation Support Program to help 15 start-ups and small animation companies nurture talents and create original animation content by providing subsidy, mentoring and training. The works are promoted through participating various local and regional exhibitions and award activities such as FILMART 2016 to attract more business opportunities for the start-ups and SMEs.

年間,生產力局協助香港互動市務商會,推行了第三屆微電影「創+作」支援計劃(音樂篇),為 18 家初創廣告製作公司及 18 位年青歌手,在培訓、宣傳及製作資源方面提供支援,製作原創微電影。

During the year, HKPC assisted the Hong Kong Association of Interactive Marketing to implement the 3rd Microfilm Support Scheme (Music), the Scheme assisted 18 advertising production start-up companies and 18 young singers with support in training, promotion and production resources to create original microfilm works.







72)再循環 reCYCLE





經濟增長一直是建基於「耗用、製造、棄置」的線性模式。第四次工業革命倡導的彈性生產概念,將可更有效地利用資源和能源。由物聯網收集的數據,讓企業清楚掌握能源和物料的使用,從而提升營運效率、減少資源浪費,有助實現循環經濟。

Economic growth has long been based on the linear "take, make, dispose" model. The fourth industrial revolution holds the promise of being more agile and flexible resulting in a more efficient use of resources and energy. Information captured by the "Internet of things" (IoT) will provide valuable data on energy and material usages, enabling businesses around the world to make good decisions to eradicate waste and use resources effectively, realizing the vision of a circular economy.





回收業升級 Empowering Recycling Industry

回收基金於 2015 年 10 月正式啟動,旨在透過提升回收業的運作能力及效率,促進廢物再造及回收,從而實現香港的減廢目標。生產力局擔任回收基金的執行伙伴及秘書處。

Launched in October 2015, the \$1 billion Recycling Fund aims to promote the recovery and recycling of waste by facilitating the upgrading of the operational capabilities and efficiency of the recycling industry for sustainable development in order to achieve the objectives of waste reduction in Hong Kong. HKPC serves as the implementation partner as well as the secretariat for the Recycling Fund.

回收基金為期 5 年,截至 2015 年 11 月共接獲 94 宗申請,涉及不同類型的可回收物料,包括:金屬、紙、塑膠、木材、輪胎、廚餘及廢食油等。

The Recycling Fund is open to applications for 5 years. A total of 94 submissions had been received as of November 2015. These applications involved different types of recyclable materials, including metals, paper, plastics, wood, rubber tyres, food waste and used cooking oil, etc.

在獲批的 29 宗申請中,包括 26 個企業資助計劃項目和三個行業支援計劃項目,涉及的資助金額約 2.800 萬元。

Among the 29 approved applications, 26 are under the Enterprise Support Programme and three are under the Industry Support Programme with a total funding of about \$28 million.





生產力局在香港舉辦了十多項宣傳和推廣活動,接觸了800多位回收業界及相關持份者。生產力局正進行市場和技術研究,從而了解香港回收業的最新狀況,找出成功推行回收基金的關鍵因素。

HKPC had conducted more than ten publicity and promotion activities in Hong Kong, reaching over 800 participants and stakeholders of the recycling industry. HKPC has been conducting a market and technological study to provide an up-to-date overview of the recycling trade in Hong Kong for identifying the key success factors of the Recycling Fund.

這項研究主要是收集和分析有關廢物 / 可回收物的 最新數字,以及審視回收行業的能力,確定資助的 重點領域和優先次序。

The scope of the study covers the collection and analysis of quantitative information on waste/ recyclables generation and review of the capability of the recycling industry, ascertaining the need for establishing focal areas and funding priorities.





再循環 reCYCLE





滴水成林 No Grey Area

香港房屋委員會將於屯門第54區第2號地盤 興建公共屋邨,為該屋邨裝設中水回用系統, 回收花灑、廁所洗手盆、廚房和洗衣機所排放 的淡水,作為園景灌溉用途。

The Hong Kong Housing Authority (HA) is going to build a new public estate in Tuen Mun Area 54 Site 2. A grey water recycling system will be built to reclaim fresh water collected from the shower trays, water basins, kitchen floor drains and washing machines for landscape irrigation.

生產力局獲委託發展這套中水回用系統,這是 首次在公共屋邨安裝的同類系統。

HKPC is going to develop this grey water recycling system which will be the first in Hong Kong's public housing estate.







零排放回收廢物 A Vehicle for Green

為符合日益嚴格的排放要求,柴油貨車的維修成本不斷上升,增加了廢物回收貨車的營運成本。

The running cost of garbage collection trucks has been on the rise which is mainly due to the need to meet the ever tightening emission requirements by these diesel powered trucks.

全電動貨車更節能、更寧靜、營運成本更低,為回收業界提供更環保的運輸工具。然而, 全電動貨車必須特別設計,才能配合香港特殊的路面情況。

Full-electric trucks that are more energy efficient, quieter, and cost effective in operation would provide a more environmentally friendly alternative to the recycling industry. However, the full-electric trucks have to be made to cater for the city's unique road conditions.



香港品牌 Hong Kong Brand 16 唯 Ton 電動勾斗式固體 廢物回收貨車 eTruck

在創新及科技基金和業界支持下,生產力局正開發 16 噸全電動勾斗式固體廢物回收貨車,在香港和內地運送建築和裝修廢物。電動貨車配備拉臂勾斗,以供裝卸盛載廢物的箕斗。

In collaboration with an industry partner and supported by the ITF, HKPC is developing a 16 ton medium electric truck (eTruck) for transporting construction and renovation waste in Hong Kong and mainland China. The eTruck will be equipped with an arm roll hooklift to mount and demount the disposal waste container.

這全電動貨車將有助降低本地回收業的營運成本,其 操作寧靜和零排放的優點,亦可開拓新商機,例如可 在晚間收集垃圾,符合工業和住宅區的要求。

The e-truck will help the local recycling industry lower the running cost and its silent operation and zero-emission can also create new opportunities for the industry such as collecting garbage at night time to satisfy the requirements of some industrial and residential areas.



電動巴士是都市運輸實現可持續發展的要素。在2013年, 生產力局獲得創新及科技基金資助,開展電動巴士的開發 工作。該項目包括設計和製造兩輛電動巴士原型車用作功 能檢定及測試,以供業界伙伴將研發成果商品化。

Electric buses are an essential element of sustainable urban transportation. Supported by ITF, HKPC embarked on an electric bus R&D project in 2013 to design and produce two prototype electric buses for functionality checks and tests, paving the way for the industry partner of this project to commercialize the R&D result.

在 2015 年,電動巴士的原型車已在內地和香港進行超過 15,000 公里的路面測試。項目團隊更聘請了獨立認證機構對原型車進行功能和性能測試。有關測試於 2015 年 11 月完成,所有測試表現均符合項目要求。

During 2015, the two prototype electric buses underwent over 15,000 km of road tests in the Mainland and Hong Kong. HKPC also engaged an independent testing body to conduct functional and performance tests. The tests were completed in November 2015 with all test results meeting the design and client's requirements.

這輛電動巴士具有車身輕、續航力強、智能化及本地設計 的四大特點。它特別針對本港的獨特駕駛環境及本地專營 巴士的運作模式而設計,協助本地企業進軍漸趨成形的綠 色集體公共運輸市場。

The HKPC-developed electric bus has four distinctive features - light body, extended range, intelligent and localized design. It fully caters to the unique traffic condition of Hong Kong and the operation model of local franchised bus companies. The project also enables local companies to tap the emerging green public transport market in Hong Kong and the Mainland.





中速充電推廣電動車 Recharge

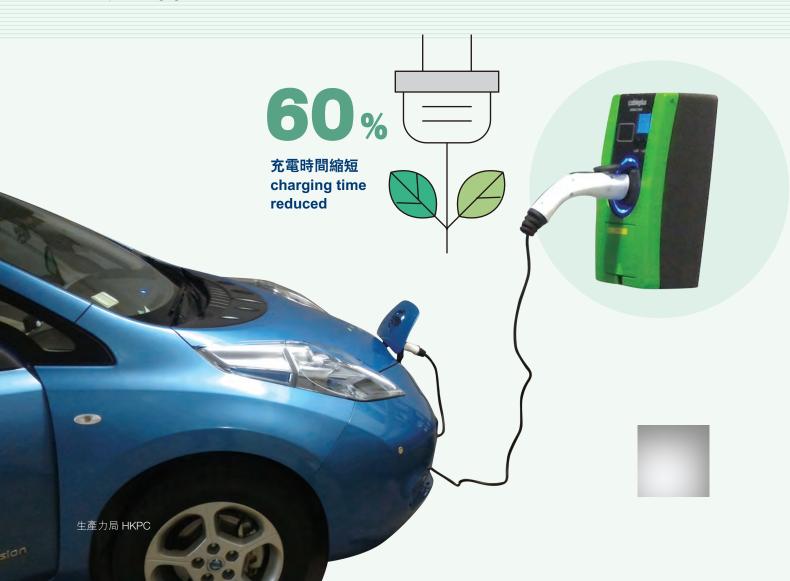
在 2016 年的施政報告中,政府宣佈將更多公共電動汽車充電器提升至中速水平,以及協助物業管理公司增建更多充電設施。

In the 2016 Policy Address, the Chief Executive announced that the Government will upgrade more public EV chargers to medium-speed chargers, and support property management companies to install more charging facilities.

為更有效推廣使用電動汽車,中華電力有限公司 (中電)將 12 個地點的標準充電設施升級至中速 充電。

To better promote the use of Electric Vehicles, CLP Power Hong Kong Limited (CLP) decided to upgrade its existing standard charging facilities to semi-quick charging facilities at 12 sites. 生產力局為中電提供了電動車充電及管理系統,中速充電器兼容國際電動汽車充電標準,比標準充電器縮短 60% 充電時間,市民可以在更多停車場享受更快捷的充電服務。

HKPC promptly provides a comprehensive EV charging and managment solution to CLP. Compatible with international standard, the semi-quick chargers can reduce the charging time by as much as 60% compared with standard chargers. EV users can enjoy shorter charging time with these semi-quick charging facilities in more car parks.





生產力局設計了靈活的電子支付方案,可提供多種 支付方式,有助電動車充電服務的商業發展,吸引 更多服務供應商在停車場設立充電器。

The flexible e-Payment module also caters to multiple combinations of payment methods, a sustainable business model can be realized through this e-Payment system. It will attract more service providers to install EV chargers in their car parks.

通過運用物聯網技術的網絡管理系統,中電可遙距 監控和管理充電站的運作狀況,以便維修團隊即時 處理系統問題,確保充電站正常運作。

Through the network management system that make use of Internet of Things (IoT) technology, CLP can also remotely monitor and manage the charging points such that CLP's maintenance team can respond immediately to system issues to ensure reliable operation of the charging facilities.

流動充電急救「死火」電動車 Smart Charger on the GO

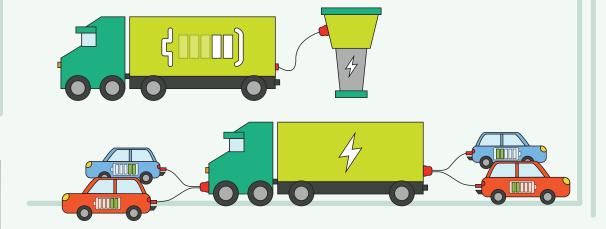


全港首套流動電動車充電系統,由生產力局汽車零部件研究及發展中心所開發。傳統充電站必須設置在固定地點,此流動充電系統可為耗盡電力的電動車和商用電動車隊,提供高度靈活的多制式充電方案,為不能安裝固定充電站的場所提供充電支援。

Developed by the Automotive Parts and Accessory Systems R&D Centre (APAS) of HKPC, the mobilized EV charger is set to be the first of its kind in Hong Kong. While traditional EV charging stations are stationed in a fixed location, the mobilized EV charger offers highly flexible and multi-standard charging solutions for battery-drained EVs or fleet EVs, where EV charging stations are not available.

系統採用電池包供電,比外國以柴油發電機供電的同類系統更環保。此外,系統支援不同的快速或中速充電標準,約20分鐘便能為電動車充電50%。

Compared to other emergency diesel engine charging service truck in overseas, the HKPC-developed mobilized EV charger is more eco-friendly as the electricity is supplied by a battery pack. It only takes 20 minutes to get an EV charged from zero up to 50%.









清潔牛產伙伴 **New phase of Cleaner Production Partnership**

延展了兩年的「清潔生產伙伴計劃」已於 2015年3月完成,為延續計劃的成效,進一 步鼓勵港資工廠採用清潔生產措施,政府再注 資 1.5 億港元,將「伙伴計劃」從 2015 年 6 月再延長5年至2020年3月。

To further encourage Hong Kong-owned factories to adopt cleaner production measures, upon successful completion of the two years extension programme of the Cleaner Production Partnership Programme in March 2015, the Government decided to inject an additional funding of HK\$150 million to extend the Programme for another five years from June 2015 to March 2020.

「伙伴計劃」為香港及廣東省地區港資廠商提 供財政及技術支援,協助他們採用清潔生產技 術和作業方式,以節省能源消耗,減少空氣污 染物的排放,以及改善區內的空氣質素。

The programme provides financial and technical support to help Hong Kong-owned factories in Guangdong Province to adopt cleaner production technologies and practices to reduce energy consumption and pollutant emissions thereby helping improve the regional air quality.

新一期的「伙伴計劃」提高了資助金額,鼓勵更多港資工廠採用清潔生 產技術, 並舉辦不同的推廣活動, 以及發表示範項目和驗證項目報告, 向業界分享「伙伴計劃」所累積的成功經驗。

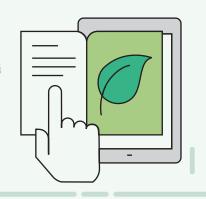
The new phase provides higher funding support to encourage more factories to adopt cleaner production technologies and continues to disseminate the successful experiences accumulated in the programme to the industries through technology promotion activities and case reports for completed demonstration projects and verification projects.



「伙伴計劃」四大項目 **Four Key Initiatives**

- 1. 全面的技術推廣 Extensive technology promotion
- 2. 實地評估 On-site improvement assessment
- 3. 清潔生產技術示範項目 Demonstration projects for Cleaner Production technologies
- 4. 鼓勵商會和行業協會推廣清潔生產的機 構支援項目

Organization Support Initiatives (OSI) to encourage industry and trade associations to promote cleaner production











163 家企業獲頒「粵港清潔生產伙伴」標誌,以表嘉許。

A total of 163 enterprises were commended as Hong Kong-Guangdong Cleaner Production Partners to recognize their efforts in pursuing cleaner production.

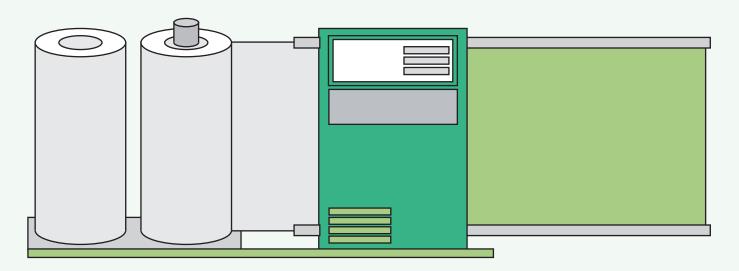










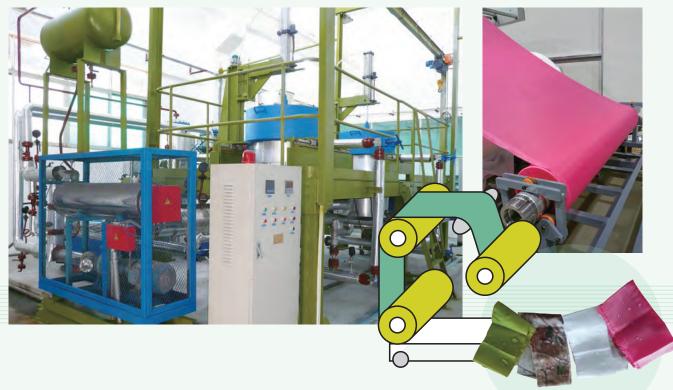


港資企業在廣東和珠三角地區開設了不少漂染廠。基於社會對環境日益關注,當局收緊了廢水和化學品的排放條例,威脅這些企業的營運。

Lots of dye factories in Guangdong and the Pearl River Delta area are founded by Hong Kong companies. The tightened rules in effluent and chemicals discharge owing to the increasing environmental concerns threatens the survival of these companies.





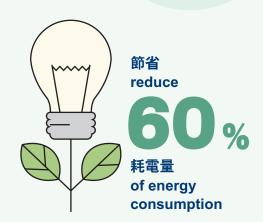


在創新及科技基金支持下,生產力局聯同香港 紡織及成衣研發中心和業界伙伴,合作開發了 「無水紡織品處理系統」。

With support from the ITF, HKPC collaborated with the Hong Kong Research Institute of Textiles and Apparel and an industry partner to develop a "Waterless Textile Materials Processing System".

它利用超臨界流體的無水系統,綜合處理「清洗」、「染色」及「功能加工」三個紡織印染工序,實現零排放,解決廢水污染問題。這技術不但可節省60%耗電量,而且處理時間亦比傳統方法少一半。

With zero emission, the "waterless" system addresses the wastewater issue by using supercritical fluid to integrate cleaning, dyeing and functional treatments processes. The technology can reduce 60% of energy consumption, while shortening the traditional dyeing and finishing process time by half.



處理時間 Processing time









根據《香港資源循環藍圖 2013 - 2022》,香港每日 產生約 3,600 公噸廚餘,佔整體都市固體廢物約四成。

According to the "Hong Kong Blueprint for Sustainable Use of Resources 2013 – 2022", approximately 3,600 tonnes of food waste are disposed every day, accounting for about 40% of total municipal solid waste in Hong Kong.





每天可處理廚餘 Food waste handled daily

50 公斤 kg



其中一個最有潛力解決香港棄置廚餘問題的方案,是利用厭氧消化將廚餘轉化為高純度沼氣的生物能源。

Anaerobic digestion of converting food waste to methane for power generation is one of the most promising technologies to tackle the food waste disposal problem in Hong Kong.

生產力局於 2014 年 1 月展開「廚餘全面轉化系統」的開發,在 上水建立了一個每天可處理 50 公斤的廚餘處理站,以評估系統 性能。

HKPC commenced the development of a novel compact anaerobic digestion system in January 2014 with a 50kg/day pilot plant set up at a local food waste processing site in Sheung Shui to evaluate its performance.

這系統可以減少棄置堆填區的廚餘量,本地社會可直接得益,而 其產生的沼氣也可為飲食業提供煮食用的另類能源,協助本地回 收業界創造商機。

The system is set to bring direct benefit to the community by reducing the volume of food waste destined to the landfill sites, the biogas generated can be used as an alternative energy for cooking at restaurants and create business opportunities for the recycling industry.

廚餘



廚餘全面轉化系統 **Anaerobic Digestion System for Food Waste Treatment**









自動廚餘篩選機 **Automatic Food** Waste Sorting



超聲波前處理系統 Ultrasonic **Pretreatment**

第二階段 **Stage Two**



透膜過濾器 **Membrane Filter**



Wastewater



沼氣 Methane



產甲烷生物反應器 Methanogenesis **Bioreactor**



第三階段 Stage **Three**

營養液

Nutrient

Solution



分解有機物反應器 **Hydrolysis Bioreactor**



固體殘餘 Sludge



環保魚糧 Fish Feed



浮油 Waste oil



生物柴油 **Biodiesel**











香港女工商及專業人員聯會獲環境及自然保育基金的資助,聯同生產力局推出為期 18 個月的減少浪費食物計劃 - 「傳承惜食」計劃,以積極推動社區減少浪費食物。

The Hong Kong Women Professionals and Entrepreneurs Association (HKWPEA), in collaboration with the HKPC were awarded a grant from the Environment and Conservation Fund to launch an 18-month food waste reduction programme, entitled "FoodEver WasteNever Programme", to motivate community action for food waste reduction.

「傳承惜食」計劃與本港其他食物管理計劃互相補足,以鼓勵社會 參與廚餘管理的活動。該計劃特別為支持「惜食香港」提出的政策 措施而設。

The FoodEver WasteNever Programme complements other food management programmes in Hong Kong to encourage community-wide participation in food waste management in Hong Kong. In particular, this Programme is designed to support the policy initiatives raised by the "Food Wise Hong Kong".



計劃舉行了一系列的活動,向不同機構介紹食品生命週期管理的概念,使他們在日常營運過程中能夠採取更有效的廚餘管理措施。

A series of activities have been arranged to introduce food life cycle management concept to organizations to help them adopt a more effective food waste management approach in their daily operations.







商界減碳建未來 **CarbonSmart Programme**

在環境及自然保育基金的支援下,生產力 局與香港工業總會、香港總商會,以及商 界環保協會合作,成功完成了為期三年半 的「商界減碳建未來」計劃。

With funding support from the Environment and Conservation Fund (ECF), the 3.5year CarbonSmart Programme has been successfully delivered by HKPC in collaboration with The Federation of Hong Kong Industries (FHKI), Hong Kong General Chamber of Commerce (HKGCC) and Business Environment Council (BEC).

計劃成功提高本地企業對碳審計的意識和 知識,在資助下,推出了超過300個碳審 計個案。通過這個啟動計劃,工商企業認 識到碳審計的價值,並開展可行的減碳措 施。

The Programme has successfully enhanced local businesses' awareness and knowledge on carbon audit and has created over 300 carbon audit showcases through its funding support. Through this kick-start programme, the business community have become cognizant of the value of carbon audit and started to identify feasible carbon reduction opportunities.



「商界減碳建未來」成功推行 A Successful CarbonSmart **Programme**

碳審計領航計劃

Carbon Audit Pilot Fund (CAPF)

完成碳審計項目 Completed carbon audit projects

平均減碳數字 Average carbon reduction



企業參與

Business Engagment

24 個工作坊 / 研討會 / 論壇 24 Workshops / Seminars / >1,600 Forum

participants

5 個商業配對交流環節

5 Business Matchmaking Sessions

>600

participants

能源相關服務公司 energy-related companies

查詢服務

Helpdesk

>3,200

enquiries



「商界減碳建未來」計劃於 2015 年 10 月 7日舉行閉幕活動 - 「企業減碳成就嘉許 典禮暨合作夥伴交流會」,環境局局長黃 錦星擔任主禮嘉賓。

As a closing event concluding the project, a CarbonSmart Achiever Awards Presentation Ceremony cum Business Matching Session was carried out on 7 Oct 2015 with The Hon Wong Kam-sing, Secretary for the Environment as Guestof-Honour.



再循環 reCYCLE





環保盂蘭 Ghost Festival Goes Green

香港人傳統在每年農曆七月的盂蘭節都會 燃燒冥鏹,卻產生大量灰塵和濃煙,滋擾 鄰近民居。

Many local residents burn joss paper and paper artifacts during the traditional Yu Lan Ghost Festival in the Lunar Calendar month of July each year. However, the flue gas generated causes much nuisance to the neighbourhood.

環境保護署委託生產力局設計及研發設有 空氣污染控制設備的流動化寶爐,向盂蘭 勝會主辦單位示範如何減少空氣污染,並 探討在盂蘭節推行其他環保措施。

The Environmental Protection
Department (EPD) commissioned
HKPC to design and develop mobile
furnaces equipped with proper Air
Pollution Control Equipment (APCE)
for demonstration to Yu Lan event
organizers in mitigating air pollution.
Moreover, HKPC also explored with
relevant parties other green measures
that can be implemented in Yu Lan
Ghost Festival.





生產力局開發了加有空氣污染控制設備的流動化寶爐, 以減少煙霧中的微粒及對周圍環境的滋擾。根據問卷調查結果,差不多全部(92%)盂蘭勝會的主辦單位均認同, 流動化寶爐可減少燃燒冥鏹時的空氣污染。

HKPC developed a mobile furnace with proper APCE to minimize the particulate emission and reduce nuisance to the neighbourhood. From the questionnaire survey results, nearly all (92%) surveyed Yu Lan event organizers agreed that the furnace could eliminate smoke and ash flakes from joss paper burning and achieve no visible emissions at discharge.

在諮詢盂蘭勝會的主辦單位和相關機構後,並評估各項環保措施的實用性和可行性,生產力局編制了環保指引,並派發給盂蘭勝會的主辦單位。

By consulting Yu Lan event organizers and relevant parties, the practicality and feasibility of the implementation of green measures in Yu Lan Ghost Festival have been evaluated and compiled into Green Measures Booklets for distribution to Yu Lan event organizers.









鉛來鉛去 Lead in Drinking Water

因應八家幼稚園十台飲水機的食水樣辦含鉛量均超出 世界衛生組織的標準,生產力局獲水務署委託研究不 合格飲水機的含鉛原因,及建議新飲水機的要求。

In connection with the finding of lead content in the drinking water samples taken from ten wall-mounted dispensers in eight kindergartens exceeding the World Health Organization (WHO) provisional guideline value, the Water Supplies Department (WSD) appointed HKPC to conduct a study to identify the causes of excess lead in the failed dispensers and offer advice to WSD on the requirements for new dispensers.

生產力局測試了市面常見牌子的兩台舊飲水機和四台新的飲水機,研究顯示含鉛焊料是導致飲水機食水在煮沸後含過量鉛的主要原因。

The study comprised tests on two used and four new wall-mounted dispensers of common brands available in the market. The results of the study revealed that leaded soldering material was the major source leading to excessive lead in drinking water in the dispensers after boiling.

生產力局擁有認可水化驗、廢水工程和物料技術等 多方面的專家,故可在短時間內為水務署提供一站 式服務,找出問題成因及提供解決方案。

Banking on our in-house expertise on accredited water laboratory analyses, wastewater engineering and materials technology, HKPC provided a onestop solution to WSD to diagnose the problem and find mitigation measures within a tight timeframe.









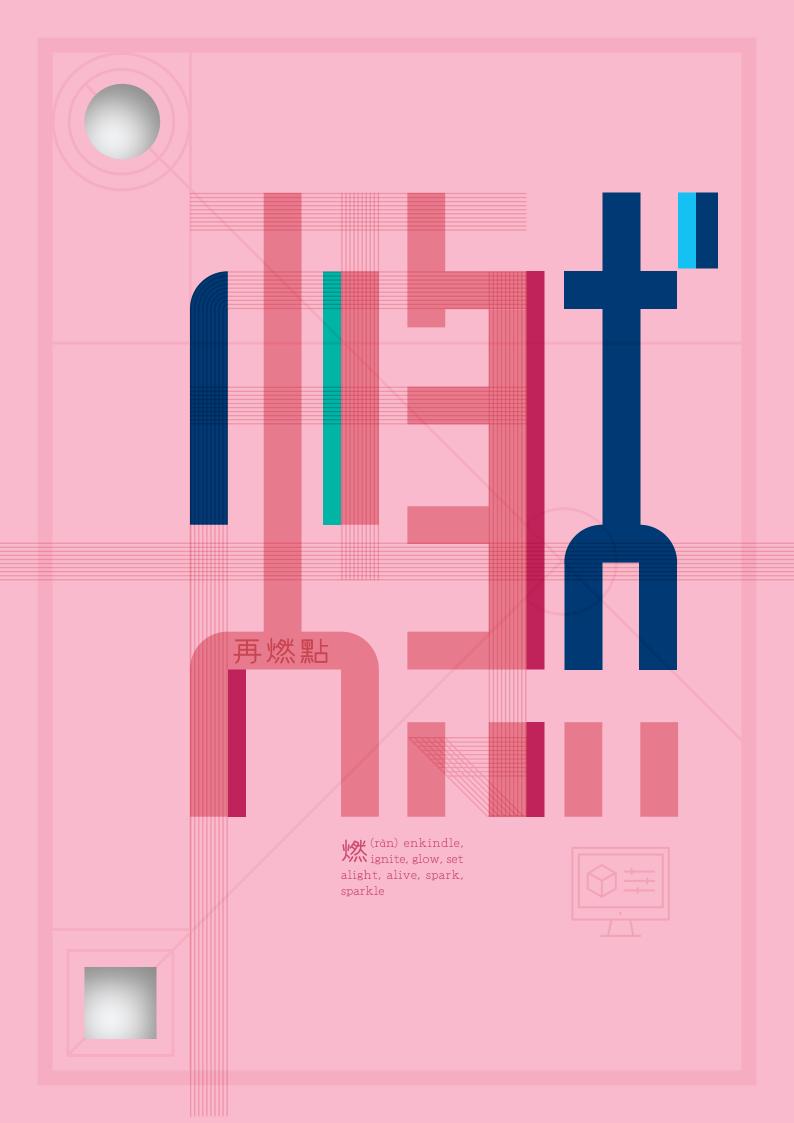


reKINDLE

第四次產業革命將根本地改變整個社會, 企業必須致力解決社會問題,燃點社會 創新的動力。

The fourth industrial revolution is going to fundamentally change human society, Enterprises should rekindle their commitment to devising innovative and sustainable solutions to social challenges.





(90)

再燃點

reKINDLE



不少針對工業 4.0 的討論都是圍繞技術範疇,但是,數碼化不單改變生產過程,更將改變整個社會。產業革命即將來臨,企業必須致力令數碼化的效益惠及社會所有持份者,燃點社會創新的動力,邁向可持續發展。

Many discussions about Industry 4.0 today mainly focus on its technical side, but increasing digitization of the value chain not only makes an impact on the manufacturing process but the whole society. In the forthcoming industrial revolution, enterprises need to keep in mind that benefits from digitization are distributed amongst the society at large, leading to social progress and a more sustainable society.



Higg 你要識 What the Higg?

可持續發展成衣聯盟 (SAC) 在 2012 年初推出 Higg 指數,SAC 有過百會員,代表全球超過三分一的紡織、成衣及鞋履業界。Higg 指數旨在制定統一方法,以評核業內企業的可持續發展表現。

Higg 指數獲全球逾 20 家大型服裝企業和零售商採用,以評核全球超過 2,500 家供應商。

In early 2012, the Sustainable Apparel Coalition (SAC), a global trade association with over 100 members and representing more than a third of the global textiles, apparel and footwear industries, released the Higg Index to create a common means to benchmark sustainability performance within the industry.

The Higg Index has been adopted globally by over 20 large apparel companies or retailers for assessing over 2,500 suppliers worldwide.









因 Higg 之名 Why is it called Higg?

「Higg」指數的起名,靈感來自希格斯粒子的追尋。因希格斯粒子改變了大眾對宇宙的認識,而 Higg 指數亦協助改變供應鏈的可持續發展。

The name Higg was inspired by the search for the Higgs Boson. As the Higgs Boson changed our understanding of the universe, the Higg Index will help to change sustainability of the supply chain. 指數已成為業界比較和挑選供應商的評估標準,不採用 Higg 指數有機會被買家剔出供應商名單,損失難以估計。

The Higg Index score has become the common standard for selecting suppliers in the apparel and footwear industry. Those have not adopted the Higg Index might be excluded from the buyers' supplier list, resulting in immeasurable business loss.

但大部分香港紡織、成衣和鞋履企業,特別是中小企仍未 意識到 Higg 指數的價值,據估計,只有 5% 的本地業界 採用 Higg 指數。

Despite this prominent global trend, most Hong Kong textiles, apparel and footwear companies, particularly SMEs, are still not aware of the value of the Higg Index. It is estimated that there are only about 5% of Higg Index adopters in the local industry.

有見及此,在工業貿易署「中小企業發展支援基金」資助下,香港時裝企業持續發展聯盟聯同製衣業訓練局及生產力局合作推行為期12個月的項目,透過發展網上協作工具,研討會及技術支援,以協助本地企業了解Higq,獲得更高的Higq評分。

To bridge the gap, the Sustainable Fashion Business Consortium (SFBC), Clothing Industry Training Authority (CITA) and HKPC have launched a 12-month project with the funding support of the SME Development Fund. Comprising web toolkit, workshops and helpdesk, the project aims to gear the companies towards better understanding of Higg Index and attain a higher score in the assessment.

其中的網上智能協作工具 (http://higgweb.sfbc.org.hk/) 為企業提供按步指引,進行 Higg 指數自我評估,更可參考系統所提供的解決方案,改進企業的可持續發展表現。

The core element of this project is a web-based Smart Toolkit (http://higgweb.sfbc.org.hk) which provides a user-friendly and step-by-step guidance for companies to conduct the Higg Index 2.0 assessment, it also offers tailor-made advisory solutions for companies to further improve their sustainability performance.



香港中小企的得益 Benefits to HK SMEs

- 節省準確了解 Higg 指數的時間和成本 Save time and cost to interpret Higg Index requirements
- 免費諮詢,以改善可持續發展效益
 Free advisory to improve sustainability performance
- 提高 Higg 評分,加強海外市場競爭力 Enhance competitiveness by achieving a higher Higg score
- 有效符合不同客戶的要求 Effectively manage compliance with different buyers' requirements
- 為未來強制採用 Higg 指數作好準備 Get ready for future mandatory Higg verification





可持續發展報告 Sustainability Reporting

Global Reporting Initiative 的第四版指引 (簡稱 GRI G4)為企業編製《可持續發 展報告》提供了國際認可的內容框架。

The Global Reporting Initiative (GRI) G4 is a leading global framework for reporting corporate sustainability performance.



作為 GRI 香港首家 Global Conference Network Partner, 生產力局一直與 GRI 緊密合作推廣 GRI G4 的應用,充分掌握 G4 指引,可協助本地企業符合指引的要求。

As the first GRI's Global Conference Network Partner in Hong Kong, HKPC works very closely with GRI to promote the adoption of G4 Guidelines in Hong Kong and has developed in-depth and first hand understanding of the Guidelines to assist organizations in meeting the requirements.

生產力協助渠務署準備第一份 GRI G4 的可持續發展報告,展示渠務署對香港可持續發展的承諾。

HKPC assisted the Drainage Services Department (DSD) to prepare its first GRI G4 Sustainability Report. The Report serves as a testimony of DSD's commitment to promoting sustainable development of Hong Kong.

根據 GRI G4 指引,在準備可持續發展報告的過程,機構須符合多項披露資料的要求,如能源、排放物管理、水、生物多樣性、職業健康及安全、客戶滿意度等。過程中收集的數據和資料,不單為撰寫報告提供有用資料,亦為改善機構效益提供重要方向。

Prepared in accordance with the GRI G4 Guidelines, the Report has to fulfil disclosure requirements in aspects such as energy, emission management, water, biodiversity, occupational health and safety and customer satisfaction, etc. Data and information collected during the process not only provide useful input for preparing the report, but insights for improving its sustainability performance.

截至 2015 年 12 月,渠務署 2013/14 年度可持續發展報告在五個國際和本地比賽中 榮獲七個獎項。

As of December 2015, the DSD 2013-14 Sustainability Report obtained 7 awards in 5 international and local competitions.



渠務署署長唐嘉鴻接受可持續發展 報告獎項。

Mr Edwin Tong Ka-hung, Director of Drainage Services, receives the Sustainability Reporting Award.







展覽業可持續發展 Exhibiting Sustainability

生產力局亦協助香港會議展覽中心(管理) 有限公司(「會展管理公司」)成為全港首間 榮獲 ISO 20121 活動可持續發展管理系統認證 的機構。

HKPC also assisted the Hong Kong Convention and Exhibition Centre (Management) Limited (HML) in establishing the first ISO 20121 certified Event Sustainability Management System (ESMS) in Hong Kong.





生產力局 ISO 20121 顧問方案 HKPC's ISO 20121 Solution

- 審視活動營運的 可持續發展
 Review the sustainability of event operations
- 系統設計及發展
 System design and development
- 加強員工的溝通和能力 Staff communication and competence building
- 評核系統的表現 Assess system performance
- 管理認證過程
 Coordinate
 certification process

會展管理公司負責香港會議展覽中心日常的運作和管理,於 2014年委託生產力局擔任技術顧問,並伙拍英國標準協會 (BSI) 為認證機構,旨在制定和實施符合 ISO 20121 國際標準的活動 可持續發展管理系統。

HML is responsible for the daily operation and management of the Hong Kong Convention and Exhibition Centre (HKCEC). HML engaged HKPC as consultant and British Standards Institution (BSI) as certification body in 2014, aiming to develop an event sustainability management system for certification with the new international standard on event sustainability – ISO 20121.

會展管理公司於 2015 年 11 月獲頒 ISO 20121 證書後,再次委託生產力局推行內部審核,以確保可持續發展活動管理系統的順利推行及持續改善。

Subsequent to the issuance of the formal certification in November 2015, HKPC was also commissioned to conduct internal audit for HML in a separate project to ensure the smooth implementation of the ESMS and to identify areas for improvement.







職場天堂 Work Like Heaven

面對市場的激烈競爭,企業須建立健康愉快的工作環境,藉此培養員工的正面思維、激發創新意念,提供真誠的優質客戶服務,才能加強企業的抗逆能力。

When facing fierce market competitions, organizations can strengthen their resilience through building a healthy and happy working environment to promote positive mindset among workers, trigger innovative ideas and improve customer service.

為鼓勵本港企業及機構建立愉快的工作環境,提升員工工作的快樂水平,香港提升快樂指數基金會與生產力局聯合推出了「開心工作間」推廣計劃。

To encourage businesses and organizations to create a happy working environment, and to raise the happiness-at-work level of the local workforce, the Promoting Happiness Index Foundation and HKPC collaborated to launch the "Happiness-at-work Promotional Scheme."

參加單位需承諾支持建立愉快的工作環境,可獲頒「開心企業」或「開心機構」標誌,超過 320 家企業及機構已獲頒標誌。

By pledging their support to building a happy workplace, participants will be awarded the Happy Company or Happy Organization logo. Over 320 companies and organizations have been recognized as a Happy Company/Organization.



獲頒「開心企業」 或「開心機構」 Recognized as a Happy Company/ Organization







通過這個項目,生產力局期望可發揮牽 頭作用,促使各界將開心工作間的理念 融入管理措施,促進工作與生活平衡。

Through this Scheme, HKPC aims to inspire local businesses to integrate a "happy workplace" concept into management practices, and promote work-life balance.





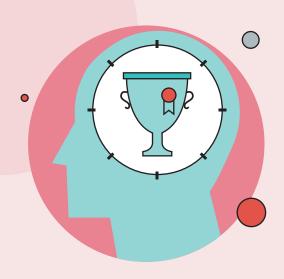




企業公民 Corporate Citizen

為提升本地企業的企業公民意識,生產力局與公民教育委員會自 2010 年起合辦「香港企業公民計劃」,為不同企業提供平台,分享企業社會責任的典範,鼓勵更多工商機構實踐企業社會責任。

To raise the awareness of corporate citizenship among local enterprises, in collaboration with the Committee on the Promotion of Civic Education, HKPC has been organizing the "Hong Kong Corporate Citizenship Program" since 2010, providing a platform for different organizations to share their best practices in Corporate Social Responsibility (CSR) and promote a wider adoption among the business community.





55 家在履行及推廣企業社會責任表現傑出的企業、義工隊及社企,在「第六屆香港傑出企業公民獎」頒獎典禮上獲得嘉許。

Fifty-five companies, corporate volunteer teams and social enterprises with outstanding achievements in implementing and promoting CSR were recognized at "The 6th Hong Kong Outstanding Corporate Citizenship Awards Presentation Ceremony."

獎項為「第六屆香港企業公民計劃」的重點活動之一。「計劃」由生產力局主辦,公民教育委員會合辦,中國銀行(香港)贊助。

The awards presentation ceremony was a highlight of "The 6th Hong Kong Corporate Citizenship Program" organized by HKPC, co-organized by the Committee on the Promotion of Civic Education, and sponsored by the Bank of China (Hong Kong).

該計劃的活動之一是備受推崇的「香港企業公民嘉許計劃」,以表揚積極履行企業社會責任的工商企業。六年來,「香港傑出企業公民獎」吸引逾700間企業參加,超過4,500人參與各類交流和社區推廣活動,提高商界及大眾對企業社會責任的意識,促使更多企業運用本身的專業,致力解決社會問題。

The programme included a prestige award scheme called "Hong Kong Outstanding Corporate Citizenship Award" to recognize enterprises' outstanding CSR achievements, over the past six years, the Awards attracted over 700 enterprises, with more than 4,500 participants. Together with a number of educational and promotional events such as seminars, experience sharing sessions and workshops, as well as the distribution of electronic booklet of CSR best practices, the Program raises public awareness and encourages enterprises to put their expertise into addressing social issues.

今屆增設了「最感動企業公民項目」及「『義想心開』義工活動計劃書創作比賽」兩個獎項。前者表揚內容及成效卓越的企業公民項目;後者則旨在促進得獎企業和社會不同單位產生協同效應,擴闊義工活動的創意。

Two new awards "The Most Touching CSR Project" and "The Best Volunteer Proposal Competition" were introduced this year. The former commends outstanding and effective CSR projects; while the latter aims to extend the scope and encourage creativity of volunteering works, promoting synergy between the winning enterprises and different organizations in the society.





推廣創意文化 Promoting Innovative Culture

為了加深本港中學生對國家航天發展的認識及推廣香港的創新科技文化,民政事務局和中國載人航天工程辦公室合辦「香港中學生太空搭載實驗方案設計比賽」。教育局為是次比賽的伙伴機構,並由生產力局、中國航天員科研訓練中心及中國空間技術研究院合作承辦。

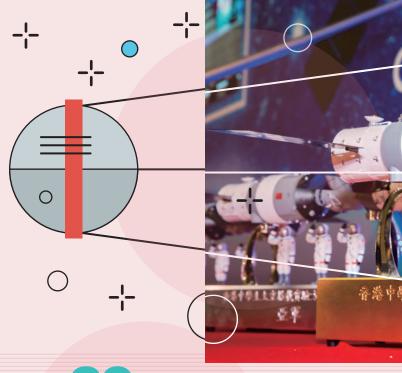
To enhance local secondary students' understanding of China's advances in aerospace science and foster a culture of innovation in Hong Kong, the Home Affairs Bureau and the China Manned Space Agency jointly organized the Space Science Experiment Design Competition for Hong Kong Secondary School Students. The competition was co-organized by the Education Bureau and implemented by HKPC, the China Astronaut Research and Training Center and the China Academy of Space Technology.

設計比賽反應熱烈,大會經嚴謹的評審後選出各個獎項的得獎隊伍,並於2015年5月舉行頒獎典禮。署理行政長官林鄭月娥和中國載人航天工程副總設計師鄭敏為頒獎典禮擔任主禮嘉賓。

The competition received an enthusiastic response. Following the final judging, the winning teams of various prizes were selected and commended at an award presentation ceremony in May 2015. The Acting Chief Executive, Mrs Carrie Lam, and the Deputy Chief Designer of the China Manned Space Program, Mr Zheng Min, officiated at the ceremony.

是次設計比賽於 2014 年 10 月展開,鼓勵全港中學生設計適合於太空環境進行的科學實驗。大會共收到來自 47 間中學 286 名同學提交的 70 份參賽作品。作品分為物理及生物實驗,內容多元化且創意十足,包括植物生長、動物行為、娛樂運動,以至食物等貼近日常生活的題材。

Launched in October 2014, the competition encouraged secondary students in the territory to design experiments that are feasible for conducting in space. A total of 70 entries were received from 286 students in 47 secondary schools. Comprising physics and biology experiments, the entries feature diverse and creative themes; many are closely related to daily life such as plant growth, animal behaviour, sports and entertainment, as well as food.



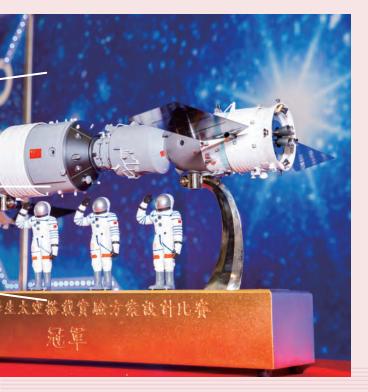
20 Riteams

入圖的隊伍接受來自北京航空 航天專家的技術指導。 of finalists had technical guidance from aerospace experts from Beijing.









設計比賽的方案評審組根據創新性、科學真確性、實驗可行性、實驗安全性和表達清晰性,選出最高分的 20組隊伍進入決賽,並由北京專程來港的航天專家 親身向學生提供指導。

The judging panel shortlisted 20 top teams for the final round based on five criteria, namely innovation, scientific validity, experimental feasibility, safety, and clarity of presentation. The 20 teams of finalists received face-to-face technical guidance from aerospace experts from Beijing.

得獎方案將由生產力局協助製成符合規格的實驗品, 一經中國載人航天工程辦公室測試成功,有機會於 2016年由中國航天員在「天宮二號」太空實驗室在 無重狀態下進行實驗示範,得獎隊伍亦有機會前往內 地參觀航天發射中心及與航天工程人員交流。 HKPC will help construct the winning experiment designs into models that are feasible for being conducted in space. Designs that can pass the testing of the China Manned Space Agency will have the opportunity to be carried onboard Tiangong-2 in 2016 for demonstration by astronauts in zero gravity. The awardees will also have the opportunity to visit Beijing Aerospace City or the spacecraft launch centre on the Mainland.

為提升市民對創新科技在日常生活應用的認知,創新科技署在香港 科學園舉辦「創新科技嘉年華 2015」,當中生產力局展示了多項 由本局專家自行研發,與「衣、食、住、行」息息相關的科研產品。

To raise public awareness on the applications of innovative technologies in daily life, HKPC showcased various self-developed advanced applied technologies and services at the InnoCarnival 2015 at the Hong Kong Science Park in Sha Tin.

「生產力展館」以「應用科技 緊扣生活 ● HKPC 科研在你身邊」為主題,室內展館設有多項互動裝置及展品,例如:3D 打印機、打印材料和製成品、綠色運輸及智能流動科技、醫療及保健設備、可降解不織布,以及零售業應用的擴增實景技術。戶外電動車展則展出多款最新型號的電動車及相關設備。

Under the theme of "Technology and Living", the indoor HKPC Pavilion showcased a variety of interactive exhibits and displays, for example 3D printers, printing materials and products; green transport and intelligent mobile technology; medical and healthcare device, degradable non-woven fibres, and augmented reality (AR) technology in retailing. The outdoor EV show displayed various latest EV models and related devices.









關愛員工 Engaging our People

生產力局一方面積極向香港工商企業 推廣企業社會責任,亦致力關懷員工, 締造和諧的工作環境。

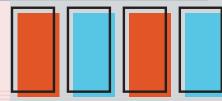
While striving to promote CSR to Hong Kong businesses, HKPC is committed to building a caring and accountable organization for employees and the community.





本局一直重視員工的健康,職員康 樂會舉辦了各式社交、體育和康樂 活動,旨在提升團隊合作精神和促 進工作與生活的平衡。

Employee wellness remains a priority for HKPC. To promote work-life balance, the Staff Recreation Club of HKPC organized a wide variety of social, sport and recreational activities aiming to enhance team spirit.



「生產力局義工隊」於 2008 年成立,鼓勵同事運用本身的專業知識,參與不同社區義務工作,以及提升業界的企業社會責任意識。

As a strong advocate of CSR, HKPC encourages its staff to apply their professional knowledge for good causes. HKPC Voluntary Group was established in 2008 to encourage active participation of HKPC staff in community services and enhance the industry's awareness of corporate social responsibility.



義工隊善用本局的資源和網絡,與香港家庭福利會合作舉辦第六屆「工業科技青少年體驗計劃」。30位中學生在三天的體驗活動中,參觀了本地及內地製造企業,認識現代工業的工作環境,而本局管理層亦分享了個人見解和事業經歷,啟發同學們為未來裝備自己。

Leveraging HKPC's resources and network, the Voluntary Group cooperated with the Hong Kong Family Welfare Society to organize the 6th HKPC Teenager Experience Programme. Throughout the three-day Programme, about 30 secondary students visited local and Mainland manufacturing companies to learn about the working environment of various industries. In addition, HKPC's senior management shared their insights and career experience so as to inspire the students to properly equip themselves for their career path ahead.





為促進管理層和員工之間的合作伙伴關係,生產力局鼓勵所有部門和不同職級的同事利用不同的溝通平台,例如:業務交流會、總裁簡報會、勞資協商會等。勞資協商會作為諮詢和協商機構,由不同職級的員工互選代表組成,為管理層和員工之間提供定期與正式的溝通和諮詢機會。

To build up partnership between senior management and staff members, HKPC employees of all ranks and divisions are encouraged to discuss business and organizational issues regularly in all kinds of communication platforms such as Business Review Meeting, Director's Briefing and Joint Consultative Committee (JCC). With representatives from different ranks elected by staff members, the JCC serves as an advisory and consultative body which provides regular and formal opportunities for communication and consultation between management and employees.

生產力局在 2015 年委託了第三方機構,度身設計進行一次不記名的「員工意見調查」。調查的主要目的是量度員工對工作的整體參與度,以協助管理層更深入了解整體員工的感受、需要和想法,從而提升個人及機構的表現。

HKPC commissioned an external consultant to conduct a customized Staff Engagement Survey in 2015. Conducted in an anonymous manner, the survey aims to gauge staff's overall engagement level at work and help management understand the overall staff's sentiment, needs and wants for improving individual and organizational performance.

98%

調查收到 98%員工的回覆,當中的結果及 員工意見有助局方塑造更正面的企業文化。

The survey received good response and was completed by 98% of staff, providing useful insights for refining HKPC's human resources policies and building a positive corporate culture.









為支持傷健人士就業,生產力局參與了由勞工及福利局主辦的「《有能者•聘之約章》及 共融機構嘉許計劃」,成為計劃的僱主機構和支持機構。

To support the employment of persons with disabilities, HKPC joined the "Talent-Wise Employment Charter and Inclusive Organisations Recognition Scheme" organized by the Labour and Welfare Bureau as both an employer organization and a supporting organization.

作為聯合國兒童基金香港委員會「母乳育嬰齊和應」活動的支持機構,生產力局改善了哺乳室,以迎合更多新媽媽的需要。

As one of the supporters of Unicef's Hong Kong's "Say Yes to Breastfeeding" campaign, the lactation room of HKPC was refurbished to accommodate for use by more new mothers in the organization.







聯繫持份者 Engaging Stakeholders

過去一年,生產力局推出多項新活動,致力將接觸層面擴展至工商業界以至社區。

A host of initiatives were introduced during the year to extend HKPC's reach to the business organizations and the community at large.





生產力局與滙豐工商金融合作推出「滙智營商 2015」,包括:專題系列報導、電視資訊廣告及中小企高峰會,為中小企提供最新的市場資訊,以及影響其業務運作的熱門話題。

The "Wise Business 2015" programme was launched jointly with the Hongkong and Shanghai Banking Corporation, comprising a new series of print editorials, TV infomercials and a SME Summit to provide local SMEs with latest market updates on current issues and hot topics affecting their business operation.

政府高級官員、知名企業家與商界領袖濟濟一堂,參與「滙智營商」高峰會2015,探討最新的環球貿易及經濟發展趨勢,以及在瞬息萬變的商業環境中所遇到的挑戰和機遇,吸引超過500位來自不同界別及行業的管理人員及企業家出席。「滙智營商」高峰會2015的主題是「轉變中的動力與機遇」。

Senior government officials, prominent industrialists and business leaders gathered at the Wise Business SME Summit 2015 to share their insights in global economic trends, as well as challenges and opportunities in the ever-changing business landscape. More than 500 businesses and entrepreneurs from different sectors and industries attended the event. The theme of Wise Business Summit 2015 was "Growth and Opportunities in a Changing Landscape."

為了讓更多人士認識生產力局的使命和服務,局方在過去一年共接待了 4,276 位訪客,以及 194 個內地、海外和本地代表團,加強他們對本局不同 範疇的工業支援服務之了解。

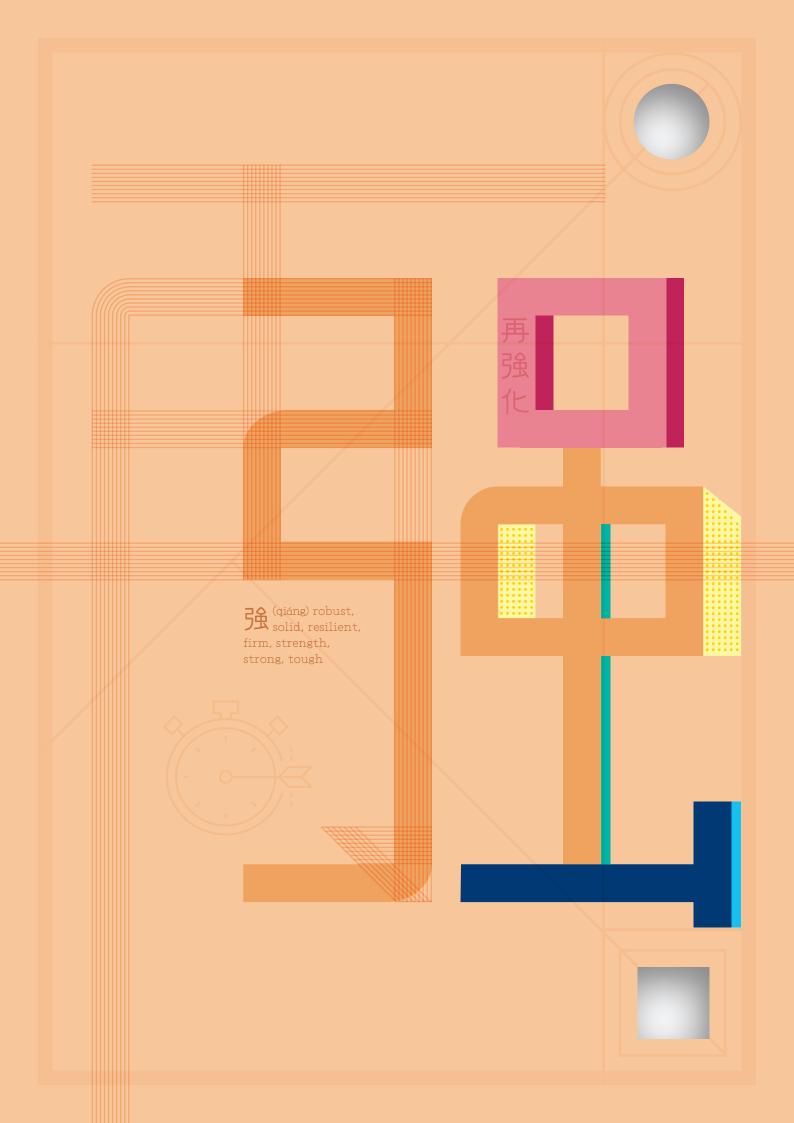
Communicating our mission and services to a wider audience, during the year HKPC played host to 4,276 visitors and 194 delegations from the mainland, overseas and locally, to enhance their understanding of its wide spectrum of industrial support services.



500

不同界別人士出席了「滙智營商」 高峰會 2015。

guests from different sectors attended the Wise Business Summit 2015.









reINFORCE

生產力局致力不斷強化企業管治, 以更有效地滿足持份者轉變的期望。

HKPC is committed to continuously reinforcing its corporate governance structure for effectively meeting the changing expectations of its stakeholders.



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再強化 reINFORCE



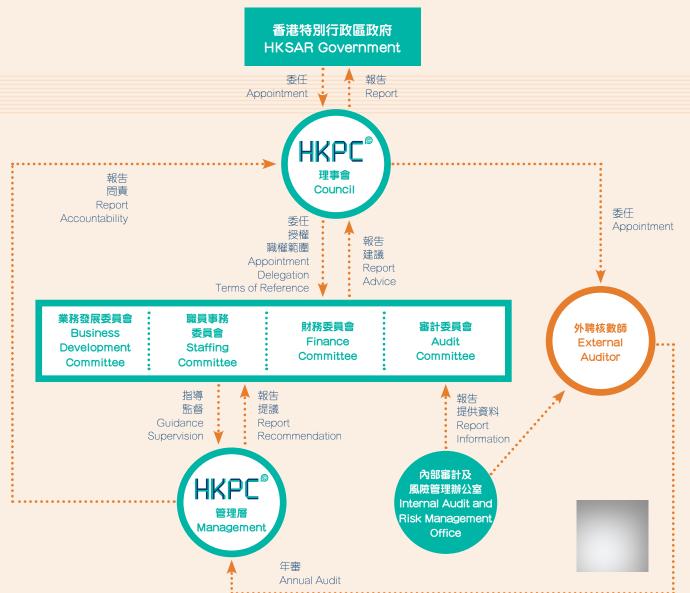


企業管治 Corporate Governance

生產力局是受《香港生產力促進局條例》 (香港法律第 1116 章)管轄的法定組織。 生產力局致力維持良好企業管治,以履行公眾使命及滿足社會期望。本局高度重視問責 性、透明度、公平及道德操守,以此作為企業管治架構的基石。 HKPC is a statutory organization governed by the Hong Kong Productivity Council Ordinance (Chapter 1116 of Laws of Hong Kong). HKPC is fully committed to maintaining good corporate governance as we strongly believe that good corporate governance is essential to accomplishing our public mission and meeting the expectations of our stakeholders. We attach paramount importance to adopting accountability, transparency, fairness and ethics as the cornerstones of our corporate governance framework.

企業管治架構

Corporate Governance Structure









理事會

The Council

理事會是生產力局的管治組織,為生產力局履 行職能提供策略領導。

The Council is the HKPC's governing body, providing strategic leadership in the fulfillment of the functions of HKPC.

理事會成員最多 23 人,由香港特區行政長官任命,包括 5 位政府官員,並於其餘的非官守成員中(包括資方、勞方及專業 / 學術界代表)委任 1 位主席及 1 位副主席。

The Council comprises not more than 23 Members appointed by the HKSAR Government, of whom five shall be public officers. Among the non-official members (who represent management, labour and professional or academic interests), a Chairman and a Deputy Chairman shall be appointed.

理事會主席及其他成員均屬非執行性質。在本年度內,理事會召開了三次會議。各成員的會議出席記錄刊載於第 113 頁。

The Chairman, and other Members, of the Council are non-executive in nature. In the year under review, the Council has convened three meetings. Attendance records of individual member are available on page 113.

理事會每年審批生產力局的三年預測、詳盡的年度計劃及預算,以及三 年策略計劃。

The Council on an annual basis approved HKPC's Three-Year Forecast, the detailed Programme and Estimates of HKPC and the Three-year Strategic Plan.

理事會成員對帳目的責任

Council Members' responsibility for the Accounts

各理事會成員均得悉本身有責任確保本局週年會計帳目的編製,已遵照 法例要求及適用會計準則。

Council Members acknowledge their responsibility for ensuring that the preparation of the annual accounts of HKPC is in accordance with statutory requirements and applicable accounting standards.

生產力局核數師就本身對生產力局帳目審核報告的責任,刊載於獨立核 數師報告及財務報告。

The statement of the Auditor of HKPC about their reporting responsibilities on the accounts of the HKPC is set out in the Independent Auditor's Report and Financial Statements.







理事會委員會

Council's Committees

理事會轄下成立了四個委員會,以處理不同範疇的事務。這四個委員會分別為:審計委員會、財務委員會、職員事務委員會,以及業務發展委員會。各委員會均對理事會負責。

Under the auspices of the Council, four committees have been set up to look after different aspects of Council business. These four committees are the Audit Committee, the Finance Committee, the Staffing Committee and the Business Development Committee. All the Committees are accountable to the Council.

理事會/委員會的會議記錄均以不具名方式刊載 於生產力局網站(若討論事項涉及敏感或機密 商業資料,以及審計委員會會議記錄則除外)。

The minutes of the Council and Committees (except discussion items containing commercially sensitive or confidential information and the minutes of the Audit Committee) are made available on a non-attributable basis on HKPC's website.

審計委員會

Audit Committee

審計委員會負責在財務報告、風險管理、內部監控,核數師的委任及表現,以及遵從相關法規等方面進行監察並提出建議,提升本局的企業管治水平。審計委員會並獲理事會授權,就責任範圍內的任何相關事項進行調查及協調。職員亦可向審計委員會主席舉報任何違規或不當行為。

The Audit Committee is established to monitor and make recommendations to enhance HKPC's healthy corporate governance in financial reporting, risk management, internal control, appointment and performance of the external auditor, and compliance with relevant laws and regulations. The Committee is authorized by the Council to investigate any activity and resolve any disagreement within its scope of duties.

本局設有內部審計及風險管理辦公室支援審計委員會的工作,並向委員 會匯報工作進度,及行政上向總裁匯報。辦公室致力協助委員會保障及 促進生產力局的企業管治水平。

Staff members can directly report to the Chairman of the Audit Committee on cases of malpractice or irregularities. The Committee is underpinned by an Internal Audit and Risk Management Office which reports functionally to the Audit Committee and administratively to the Executive Director. The Office is committed to assist the Audit Committee to safeguard and promote the healthy corporate governance of the HKPC.

審計委員會由一位理事會委員擔任主席,現時共有八位成員。在本年度內,委員會召開了三次會議。各成員的會議出席記錄刊載於第113頁。

The Audit Committee is chaired by a Council member and currently has 8 members. It met three times during the year in review. Attendance records of individual members are set out on page 113.

主席

Chairman

黃志光

Mr Patrick Wong Chi-kwong

委員會成員

Members

張益麟 馮英國本 梁廣城 梁任城城,BBS,MH 蔡淑朝,JP 麥鄧碧儀,MH,JP Mr Alan Cheung
Mr Wilson Fung Ying-wai
Dr Delman Lee
Mr Leung Kwong-chuen
Mr Leung Yam-shing
Dr Dennis Ng Wang-pun, BBS, MH
Ms Annie Choi Suk-han, JP
Mrs Agnes Mak Tang Pik-yee, MH, JP

截至 2016 年 3 月 31 日 As at 31 March 2016









財務委員會

Finance Committee

財務委員會負責監督本局的財務表現,確保資金的運用恰當。委員會審批本局有關採購、大樓管理、固定資產管理、服務收費率及投資策略和指引等政策及守則的修改。

The Finance Committee monitors the financial performance of HKPC and ensures that funds made available are properly accounted for.

The Committee approves changes to HKPC's policies and practices relating to procurement, building management, fixed asset management, charging levels of HKPC's services and investment strategy and guidelines.

委員會提交給理事會審議本局的三年策略計劃、三年財政預算、年度計劃及預算,以及主要開支項目的編配調動。委員會並就本局的財務政策及對本局有重大財務影響的事宜向理事會提出意見。

The Committee recommends HKPC's three-year strategic plan, three-year forecast, an annual programme and estimates and the transfer of funds between major heads of expenditure, for consideration by the Council. The Committee also advises the Council on matters relating to HKPC's financial policies and matters that have a significant financial impact on HKPC.

財務委員會由一位理事會委員擔任主席,現有六位成員。在本年度內,委員會召開了二次會議。各成員的會議出席記錄刊載於第 113 頁。

The Finance Committee is chaired by a Council member and currently has six members. It met two times during the year in review. Attendance records of individual members are set out on page 113.

主席 Chairman

伍志強,MH

Mr Victor Ng Chi-keung, MH

委員會成員

Members

周博軒 馮英偉 吳宏斌, BBS, MH 陳李藹倫, JP 夏國鋒 麥鄧碧儀, MH, JP Mr Felix Chow Bok-hin
Mr Wilson Fung Ying-wai
Dr Dennis Ng Wang-pun, BBS, MH
Mrs Helen Chan, JP
Mr Bryan Ha Kwok-fung
Mrs Agnes Mak Tang Pik-yee, MH, JP









職員事務委員會

Staffing Committee

職員事務委員會負責審批總經理級的委任。委員會監督職員人手情況,並於有需要時向理事會提出意見。委員會主要就人力資源發展政策向理事會提供意見。委員會還負責監察員工的服務條件,確保足以聘請及挽留能幹的職員,可於必要時向理事會提出修改建議。委員會可作為理事會與員工之間有關薪俸條件的溝通渠道,尤其是當雙方經磋商後仍無法解決問題。

The Staffing Committee approves the appointment of General Managers. The Committee monitors the staffing situation and recommends changes to the Council where appropriate. It advises the Council on human resources development policies. The Committee also monitors HKPC's general terms and conditions of service, to ensure that these are adequate to recruit and retain competent staff, and recommends changes to the Council where necessary. The Committee provides a channel between the Council and staff for the communication of grievances about general terms and conditions of service, in situations where they cannot be resolved by consultation.

職員事務委員會由一位理事會委員擔任主席,現時共有十位成員。在本年度內,委員會召開了兩次會議。各成員的會議出席記錄刊載於第113頁。

The Staffing Committee is chaired by a Council member and currently has ten members. It met two times during the year in review. Attendance records of individual members are set out on page 113.

主席

Chairman

楊悰傑 Dr Jack Yeung Chung-kit

委員會成員

Members

林錦儀

		,
李秀琼		Ms Amy Lee Sau-king
梁任城		Mr Leung Yam-shing
李凱		Mr Li Hoi
蒙美玲		Prof Helen Meng Mei-ling
顏吳餘势	英, MH, JP	Mrs Katherine Ngan Ng Yu-ying, MH, JF
黃志光		Mr Patrick Wong Chi-kwong
吳國強,	JP	Mr Byron Ng, JP
夏國鋒		Mr Bryan Ha Kwok-fung
麥鄧碧傳	義 , MH, JP	Mrs Agnes Mak Tang Pik-yee, MH, JP

Miss Lam Kam-yi











業務發展委員會

Business Development Committee

業務發展委員會負責檢討生產力局的業務情況、審批對生產力局服 務範疇作出的重大改動、探討新的業務發展機會,以及就生產力局 在工業轉型下應擔當的角色及業務發展向理事會提出建議。此外, 委員會亦負責監督生產力局附屬公司的表現。

The Business Development Committee reviews the business activities of HKPC, considers substantial changes to the HKPC's Services Audit Statement, explores new business opportunities, and advises the Council on the business development of HKPC in relation to HKPC's role in the changing industrial environment. The Committee also monitors the performance of HKPC's subsidiary companies.

業務發展委員會由一位理事會委員擔任主席,現時共有八位成員。 在本年度內,委員會召開了三次會議。各成員的會議出席記錄刊載 於第 113 頁。

The Business Development Committee is chaired by a Council member and currently has eight members. It met three times during the year in review. Attendance records of individual members are set out on page 113.

主席

Chairman

陳鎮仁, SBS, JP (至 2015 年 6 月 30 日) 劉展灝, SBS, MH, JP (自 2015 年 7 月 1 日) Dr Clement Chen Cheng-jen, SBS, JP (till 30 June 2015) Mr Stanley Lau Chin-ho, SBS, MH, JP (from 1 July 2015)

委員會成員

Members

查逸超 , JP Prof John Chai Yat-chiu, JP 李國本 Dr Delman Lee 梁廣泉 Mr Leung Kwong-chuen

蒙美玲 Prof Helen Meng Mei-ling 顏吳餘英 , MH, JP Mrs Katherine Ngan Ng Yu-ying, MH, JP

陳祖恒 Mr Sunny Tan

夏國鋒 Mr Bryan Ha Kwok-fung

麥鄧碧儀, MH, JP Mrs Agnes Mak Tang Pik-yee, MH, JP

內部監控及風險管理

Internal Control and Risk Management

理事會非常重視維持高水準的企業管治、提高本身的透明度,以及對公眾問責,而外部和內部審計系 統正可落實這宗旨。

The Council attaches significant importance to maintaining a high standard of corporate governance and the enhancing of its transparency and accountability to the public. The external and internal audit systems are instrumental in this regard.

外部審計

External Audit

理事會委任羅兵咸永道為外聘核數師,為本局財務 報告進行審計。

The Council has appointed PricewaterhouseCooper as the external auditor to conduct an audit of its financial statements.

除了審查財務報告之外,外聘核數師在加強生產力局的內部監控,也發揮重要作用。如有需要,外聘核數師會在審計程序開始前,在管理層避席下與審計委員會討論審計的性質和範疇,以及查詢任何事項。外聘核數師致管理層的所有管理建議書,以及生產力局管理層的所有回應,均交由審計委員會審閱。

The external audit plays an important role in reviewing the financial statements as well as strengthening the internal controls of HKPC. Before the audit commences, the external auditor discusses the nature and scope of the audit with the Audit Committee if necessary, together with any matters the external auditor may wish to discuss in the absence of management. Any management letter from the external auditor and the management's response will be reviewed by the Audit Committee.



再強化 reINFORCE



內部審計及風險管理 Internal Audit

內部審計及風險管理辦公室由生產力局理事會 審計委員會督導,協助處理生產力局的風險管 理工作。

The Council's Internal Audit and Risk Management Office ("ARO") is directed by the Audit Committee of HKPC to assist the management with the risk management function of the Council.

辦公室致力找出及評估潛在的營運風險,並提出相應的內部監控措施,以符合企業管治的要求。辦公室並制定和執行生產力局的審計政策和策略,以保障其資產,符合有關法律、法規,提高營運效率及效益,確保文件記錄的準確性和可靠性。

ARO proactively identifies and examines any risky area in the operations and proposes appropriate internal control measure in line with the mandates for corporate governance. ARO also formulates and executes an overall audit policy and strategy of the Council to safeguard its assets, ensure compliance with relevant laws and regulations, promote operational efficiency and effectiveness and secure accuracy and reliability of its records.

該辦公室直接向審計委員會匯報,並須在每次 審計委員會會議上,就生產力局不同運作的監 管和合規情況,向委員會報告其審計結果。

The Office reports directly to the Chairman of the Audit Committee. At every Audit Committee meeting, the Office reports to the Committee its findings on auditing of control sufficiency and compliant situation of different operations of HKPC.

在本年度內,內部審計及風險管理辦公室審核 了生產力局的十項運作,涉及生產力局的不同 範疇。各項審計工作推行前,均經過審計委員 會審批。

In the year under review, the ARO had audited 10 operations covering different aspects of HKPC. The audit job plans are reviewed and agreed by the Audit Committee in advance.

內部監控

Internal Control

為確保內部監控制度持之有效,管理層在本年報期內還執行了以下工作:

To ensure an effective system of internal control is in place, the Management has also performed the following tasks during the reporting period:

- 檢討內部監控制度的成效,並透過檢視內部審計報告的內容,向理 事會報告審查結果和建議;
 - review the effectiveness of the system of internal control and report to the Council through review of the findings and recommendations as set out in the reports of internal audit;
- 在制定年度計劃和預算時,審視各部門的資源;
 - review the resources for all divisions during the annual Programme and Estimates exercise;
- 經常審視業務、外部環境和重大風險,作為制定年度計劃和預算的 重要部份;及
 - conduct frequent review of the business, external environment and significant risks as part and parcel of the annual Programme and Estimates exercise; and
- 連同審計委員會主席會見外聘核數師,並報告於審計委員會會議上所討論的各個監控弱點,以及財務報告的效益和符合規章的情況。
 - meet with external auditors together with the Audit Committee Chairman and report any control weaknesses as well as the effectiveness of financial reporting and compliance as discussed during the meeting of the Audit Committee.

透明度

Transparency

根據《香港生產力促進局條例》的規定,生產力局每年的年報連同財務報告及核數師報告,均須呈交立法會。為提高透明度,生產力局最高兩級行政人員的薪酬,詳列於獨立核數師報告及財務報告。

In accordance with the requirements of the HKPC Ordinance, the HKPC's Annual Report, with the statement of accounts and the auditor's report, is tabled at the Legislative Council each year. To enhance transparency, the annual emoluments of each and every senior executive at the top two tiers of the HKPC management are disclosed in Independent Auditor's Report and Financial Statements.









The attendance of Members in Council and Committees is detailed on page 113.

自 2009 年 11 月起,理事會及委員會的會議記錄均以不具名方式刊載於生產力局網站(若討論事項涉及敏感或機密商業資料,以及審計委員會會議記錄則除外)。

Since November 2009, the minutes of the Council and Committees (except discussion items containing commercially sensitive or confidential information and the minutes of the Audit Committee) have been made available on a non-attributable basis on HKPC's website.

此外,理事會通過了一套「兩層式」利益申報制度,各成員必須在上任時及其後每年,申報所擁有的獨資或合資的公司,或出任董事的公司;除此之外,各成員還要披露有報酬的聘任、職位、行業、專業工作或職業,以及在各家上市和私人公司的持股量(如持有量佔公司已發行股本的1%或以上)。

Separately, the Council adopted a two-tier reporting system for declarations of interest by Council Members, who are required to disclose upon first appointment and annually thereafter proprietorships, partnerships or directorships of companies. They are also required to disclose remunerated employments, offices, trades, professions or vocations as well as shareholdings in companies, public or private (being 1% or more of the company's issued share capital).

公眾可要求查閱各項利益申報登記。此外,成員如意識到未來的議題中, 有任何事項可能涉及其利益關係,必須在該議題正式商議前,盡快向主 席(或理事會)披露。

The register of declarations is made available for public inspection upon request. Furthermore, Members are required, as soon as practicable after they have become aware of it, to disclose to the Chairman (or the Council) their interest in any matter under consideration by the Council prior to the discussion.

為進一步加強企業管治,審計委員會同意由內部審計及風險管理辦公室參照廉政公署的《公共機構成員行為守則範本》制定生產力局理事會成員的行為守則,目的是確保成員能明白及遵守生產力局的價值及行為準則,履行職務時保障持份者的利益。

To further enhance clean governance, the Audit Committee agreed that the Internal Audit and Risk Management Office would customize a Code of Conduct for Council Members based on the ICAC's "Sample of Code of Conduct for Members of Public Bodies". The objective of the Code was to communicate HKPC's values and standards of behavior for the Council Members to adhere to in the discharge of their duties of the Council in a way that contributed to the welfare of its key stakeholders.

行為守則為成員提供一套基本準則,以供判斷行為是否恰當,並在遇到常見情況時,作出適當決策,例如接受利益和款待及可預見的利益衝突等。守則涵蓋五個主要範疇:防止賄賂、利益衝突、濫用職權、保密資料及欠債。

It would also provide a framework for determining appropriate actions and making appropriate decisions for situations which Members commonly encountered such as advantages and entertainment offered, conflict of interest foreseen etc. Specifically, it included five major categories: Prevention of Bribery, Conflict of Interest, Misuse of Official Position, Confidentiality of Information and Indebtedness.

理事會於本年度通過新的行為守則。

The new Code of Conduct was approved by the Council during the year in review.



再強化 reINFORCE



舉報

Whistle Blowing

理事會推行了舉報政策,為公眾提供舉報 渠道和指引。任何人士如有合理懷疑,生 產力局或任何員工出現違規、行為失當或 舞弊情況,可通過信件或專用電郵地址 (whistleblowing@hkpc.org) 直接向審計委員會 主席舉報事件,只有獲得審計委員會主席授權 的指定人士,才可查閱有關電子郵件或信件。

The Council has a whistle blowing policy to provide the wider public with reporting channels and guidance on whistleblowing. Persons who have legitimate concern about irregularity, misconduct or malpractice of the Council or any staff member may raise the matter directly through mail or a dedicated email address (whistleblowing@hkpc.org) to the Audit Committee (AC) Chairman of the Council. Only persons who are designated by the AC Chairman will have access to such email or correspondence.

審計委員會主席會檢視有關的投訴,並決定該 如何處理,例如:提名一位合適的專員或成立 特別委員會,獨立調查事件。

The AC Chairman will review the complaint and decide how it should be addressed such as nominating an appropriate investigating officer or set up a special committee to investigate into the matter independently.

工作安全及保安管理 Safety and Security Governance

生產力局高度重視職業安全及機構保安,局方 致力為員工及持份者提供安全及健康的工作環境。為妥善處理所有安全及保安風險,局方正 推行國際標準職業健康及安全管理體系,更有 系統地識別和管理安全及健康風險。

Safety and security remains a priority of the Council. HKPC is committed to providing and preserving an inherently safe and healthy work environment for all staff and stakeholders. To ensure that safety and security risks are handled in a proper manner, HKPC is pursuing international standard certifications to identify and manage safety and health risks systematically.

年內,遵照 OHSAS 18001 標準的職業健康及安全管理體系手冊、程序及指引等標準文件均已編製及審批。

A set of documented Occupational Health & Safety Management System (OHSMS) Manual, Procedures and Instructions according to the requirements of the OHSAS 18001 guidelines was finalized and approved in Financial Year 2015/16.

生產力局依照 OHSAS 18001 標準及相關法定要求,重新檢視及修訂現有的職業健康及安全政策,並由生產力局總裁於 2015 年 5 月簽署生效。

The HKPC Occupational Safety and Health Policy was reviewed and revised according to the OHSAS 18001 guidelines and all relevant legal requirements. The Policy was signed by the Executive Director of HKPC on 15 May 2015.

須予報告的意外及險失事件均已妥善記錄,年內共有一宗須予報告的意 外及七宗險失事件。本局每千名員工的意外率為 1.67。

Reportable accidents and near miss incidents were tracked. There was one reportable accident and seven near miss incidents reported in 2015/16. The accident rate per 1,000 employees for HKPC was 1.67.

在 2015/16 年度,生產力局完全符合所有職業健康及安全的法定要求, 並編製了風險評估報告。本局亦舉行了不同的職業健康及安全訓練課程。

HKPC achieved full legal compliance on occupational health and safety in 2015/16 and the Council Risk Assessment Report was compiled. Different OHSMS related trainings were conducted.

生產力局於本年度通過 Lloyd's Register Quality Assurance 評審,並於 2016 年 3 月獲頒 OHSAS 18001 證書。

HKPC successfully passed the OHSAS 18001:2007 Certification Assessment by Lloyd's Register Quality Assurance in 2015/16 and HKPC received the OHSAS 18001:2007 certificate on 2 March 2016.













理事會及常務委員會會議出席紀錄 Council and Standing Committee Meeting Attendance Record

4/2015 – 3/2016		理事會 Council	職員事務 SC	業務發展 BDC	財務 FC	審計 AC
劉展灝先生,SBS,MH,JP (由1/7/2015)	Mr Stanley Lau Chin-ho, SBS, MH, JP (from 1/7/2015)	3/3		3/3		
伍志強先生,MH	Mr Victor Ng Chi-keung, MH	3/3		2/2		
區嘯翔先生 [,] BBS (至31/12/2015)	Mr Albert Au Siu-cheung, BBS (till 31/12/2015)	1/2			3/3	
查逸超教授,JP	Prof John Chai Yat-chiu, JP	3/3		2/3		
鄭文聰教授,MH,JP (至 31/12/2015)	Ir Prof Daniel Cheng Man-chung, MH, JP (till 31/12/2015)	1/2		2/2		
張益麟先生 (由 1/1/2016)	Mr Alan Cheung (from 1/1/2016)	1/1				
周博軒先生	Mr Felix Chow Bok-hin	3/3			0/2	
馮英偉先生 (由 1/1/2016)	Mr Wilson Fung Ying-wai (from 1/1/2016)	1/1				
李國本博士	Dr Delman Lee	2/3		2/3		2/3
梁廣泉先生	Mr Leung Kwong-chuen	3/3		3/3		3/3
梁任城先生	Mr Leung Yam-shing	3/3	2/2			3/3
蒙美玲教授	Prof Helen Meng Mei-ling	0/3	2/2	2/3		
吳大釗博士 (至 31/12/2015)	Dr David Ng Tai-chiu (till 31/12/2015)	2/2			2/2	3/3
吳宏斌博士,BBS,MH	Dr Dennis Ng Wang-pun, BBS, MH	3/3			2/2	3/3
顏吳餘英女士,MH,JP	Mrs Katherine Ngan Ng Yu-ying, MH, JP	3/3	2/2	1/3		
陳祖恒先生 (由 1/1/2016)	Mr Sunny Tan (from 1/1/2016)	1/1		1/1		
黄志光先生	Mr Patrick Wong Chi-kwong	2/3	2/2			3/3
楊悰傑博士	Dr Jack Yeung Chung-kit	3/3	2/2			
林錦儀女士	Miss Lam Kam-yi	3/3	1/2			
李秀琼女士 (由 1/1/2016)	Ms Amy Lee Sau-king (from 1/1/2016)	1/1				
李凱先生 (由 1/1/2016)	Mr Li Hoi (from 1/1/2016)	0/1				
冼啟明先生,MH (至 31/12/2015)	Mr Sin Kai-ming, MH (till 31/12/2015)	2/2	2/2			
鄧燕梨女士 (至 31/12/2015)	Ms Marilyn Tang Yin-lee (till 31/12/2015)	2/2	2/2			
商務及經濟發展局常任秘書長(通訊及 科技)或其候補委員	Permanent Secretary for Commerce and Economic Development (Communications and Technology) or her alternative members	3/3				
創新及科技局常任秘書長或其候補委員 (由 20/11/2015)	Permanent Secretary for Innovation and Technology or his alternative members (from 20/11/2015)					
創新科技署署長或其候補委員	Commissioner for Innovation and Technology or her alternative members	3/3	2/2	3/3	2/2	3/3
工業貿易署署長或其候補委員	Director-General of Trade and Industry or her alternative members	3/3				
政府經濟顧問或其候補委員	Government Economist or her alternative members	3/3			2/2	
勞工處副處長或其候補委員	Deputy Commissioner for Labour or his alternative members	3/3	2/2			
香港生產力促進局總裁	Executive Director of HKPC		2/2	3/3	2/2	3/3

職員事務-職員事務委員會,業務發展-業務發展委員會,財務-財務委員會,審計-審計委員會 SC – Staffing Committee, BDC – Business Development Committee, FC – Finance Committee, AC – Audit Committee





114 主要表現指標

Key Performance Measures



主要表現指標 **Key Performance** Measures

2011/12 2012/13 2013/14 2014/15 2015/16

服務提供 Service Delivery					
顧問項目數目	1,361	1,030	964	970	917
Number of consultancy projects					
培訓課程學員人數	6,542	5,434	4,564	3,041	4,248
Number of training course					
participants					
展覽/考察團/會議參加人數	2,631	2,048	6,474	3,969	2,221
Number of people attended					
the exhibitions/study missions/					
conferences					

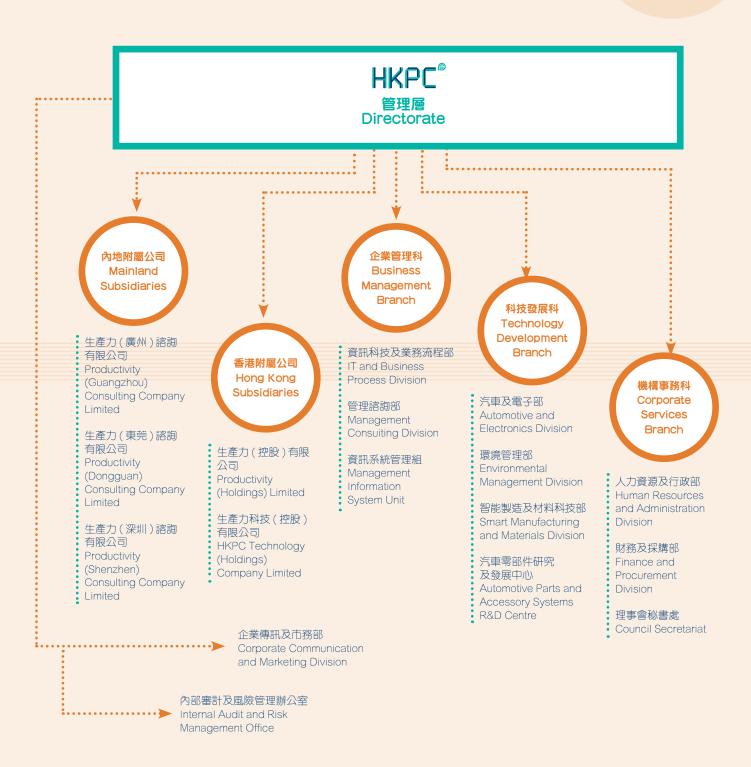
財務(百萬元)					
Financial Result (HK\$M)					
顧問項目收入	232.9	260.6	260.3	265.4	307.7
Income from consultancy projects					
培訓課程收入	21.4	18.5	17.4	12.9	8.9
Income from training courses					
展覽 / 考察團 / 會議收入 Income	13.8	10.3	7.2	9.4	4.8
from exhibitions/study missions/					
conference					
製造支援項目收入	21.2	22.3	26.3	26.0	23.6
Income from manufacturing					
support projects					

效益						
Effectiveness						
市場推廣 Marketing effort	生產力局為行業協會舉辦的活動 / 聯繫活動 / 免費研討會參加者人數 Number of people attended events/networking activities for industry associations/free seminars	21,694	22,629	24,341	23,531	20,620
客戶滿意 Customer satisfaction	客戶滿意度指數 Customer satisfaction index	8.66	9.10	9.01	8.94	8.92





Organization Structure



(116)

管理層

Senior Management





麥鄧碧儀 , мн, лр Mrs Agnes Mak Tang Pik-yee, мн, лр ^{趣詩}

Executive Director

麥鄧碧儀女士從事資訊科技行業超過 30 年,經驗豐富,在加入香港生產力促進局前成立資訊科技顧問公司,歷任多家電訊公司、私人企業及公營機構的高層職位。

Mrs Mak has over 30 solid years of experience in information technology. Prior to joining Hong Kong Productivity Council, Mrs Mak founded her own IT consultancy business. She also has extensive working experience in both private and public sectors having held key posts in various communication companies as well as statutory body.

麥女士在成功發展個人事業的同時,亦積極參與公共事務,推動資訊科技的應用,她曾任香港電腦學會會長、香港浸會大學理學院顧問委員會主席,亦是職業訓練局資訊科技培訓及發展委員會主席、創新及科技基金一般支援計劃評審委員會副主席、僱員再培訓局副主席、香港科技園董事局成員、香港學術及職業資歷評審局成員及社會福利諮詢委員會委員。麥女士現為香港城市大學顧問委員會委員(2015-至今)及財政司轄下推動使用電動車輛督導委員會委員(2015-至今)。

此外,麥女士致力推動資訊科技教育,曾出任多間專上學院的顧問委員會主席,就課程的發展和評審給予專業意見。麥女士被委任為教育局轄下的資訊科技及通訊行業「行業培訓諮詢委員會」主席,與業界代表成功制定行業的能力標準説明。麥女士更參與香港資訊科技專業認證局,與業界共同開發及推廣專業認證計劃,以確立資訊科技從業員的專業地位。

麥女士於 1995 年獲選為香港十大傑出青年,1999 年被授予香港電腦學會院士;2002 年獲香港特區政府委任為「太平紳士」;2007 年榮獲香港特區政府頒發「榮譽勳章」;2008 年獲職業訓練局頒發榮譽院士。

Along with her full-time career, Mrs Mak has been very active within the Hong Kong IT Community. She was the President of Hong Kong Computer Society, Chairman of the Advisory Committee of Science Faculty of Hong Kong Baptist University, Chairman of Committee in Information Technology Training and Development of Vocational Training council, Vice Chairman of the General Support Program Vetting Committee of the Innovation and Technology Fund, Vice Chairman of Employee Retraining Board, Board member of Hong Kong Science and Technology Parks Corporation, Member of Hong Kong Councils for Accreditation of Academic and Vocational Qualifications and Member of the Social Welfare Advisory Committee. Currently, she is a Member of Court of City University of Hong Kong (since 2015) and Member of the Steering Committee on the Promotion of Electric Vehicles under the Office of the Financial Secretary (since 2015).

In addition to being an enthusiast in promoting the quality of higher education and enriching vocational education, Mrs Mak is also an advocate in advancing professional recognition for IT professionals in Hong Kong. She has assumed Chairman of the Information & Communications Technology / Industry Training Advisory Committee under the Education Bureau of HKSAR Government. Under her leadership, the Specification of Competency Standards for the IT industry was successfully developed. She has also taken up the position of Director In-charge of the Hong Kong Institute for IT Professional Certification which pioneers the first IT Professional credentialing scheme in Hong Kong.

In 1995, Mrs Mak was recognized as one of Ten Most Outstanding Young Persons in the Hong Kong community that made significant IT contributions. In 1999, she was conferred Distinguished Fellow of the Hong Kong Computer Society. In 2002, she was appointed as a "Justice of Peace". In July 2007, she was awarded "Medal of Honor" by the HKSAR Government. And in November 2008, she was conferred Honorary Fellow of Vocational Training Council.





張梓昌博士 Dr Lawrence Cheung Chi-chong

副總裁(科技發展) Director, Technology Development

張梓昌博士具有超過25年研究及發展、管理及顧問經驗,其職責範圍涵蓋廣闊領域,包括科技研究及發展,以及汽車工業、智能電子、機械人和自動化、醫療器材、環境管理、智能物料、製造技術和測試服務等。

Dr Lawrence Cheung has over 25 years of experience in research and development, consultancy and business. He manages a broad business portfolio on technological research and development as well as consultancy services in automotive, smart electronics, robotics and automation, medical devices, environmental management, smart materials and manufacturing technology and testing services etc.

張博士現任香港無線科技商會副主席、香港電子科技商會名譽顧問、香港電子業商會執行委員、創匯 商會執行委員、特區政府通訊事務管理局辦公室無線電頻譜及技術標準諮詢委員會委員、職業訓練局 電子業及電訊業訓練委員會和技師訓練委員會委員。

張博士在加入生產力局前居於澳洲,在澳洲科學與工業研究組織 (CSIRO)擔任高層研究職位。張博士畢業於澳洲蒙納殊大學,獲工程學學士(榮譽)學位和理學士學位,其後獲蒙納殊大學博士學位。張博士於1996年加入生產力局。

He is currently the Vice Chairman of Hong Kong Wireless Technology Industry Association; Honorary Advisor of the Hong Kong Electronics and Technologies Association; an executive committee member of the Hong Kong Electronic Industries Association; an executive committee member of the Hong Kong Modern Enterprise Integration and Innovation Association; Member of Radio Spectrum and Technical Standards Advisory Committee (SSAC) of HKSAR Government Office of Communications Authority; Member of VTC Electronics and Telecommunications Training Board and Committee of Technologies Training of Vocational Training Council.

Prior to joining HKPC, Dr Cheung was living in Australia holding a senior research post in Commonwealth Scientific and Industrial Research Organisation (CSIRO) of Australia. He obtained Bachelor of Engineering with honours and Bachelor of Science degrees from Monash University in Australia. His doctorate degree was also from Monash University. Dr Cheung joined HKPC in 1996.



管理層 Senior Management





老少聰 Mr Gordon Lo Siu-chung

副總裁(企業管理)
Director, Business Management

老少聰先生具三十年管理及資訊科技顧問經驗, 範圍涵蓋業務策略研究、方案評估、可行性分析、 流程改造、系統整合、服務創新、供應鏈管理等。 多年來主要的客戶有上市公司、製造商、零售商、 銀行、電訊公司、公營機構及不同的政府部門等。

Mr Gordon Lo has over 30 years of experience in business management and IT consulting. His portfolio spans strategic planning, solution evaluation, feasibility study, process improvement, system integration, service innovation and supply chain management, etc. Major clients include listed companies, manufacturers, retailers, banks, telecom companies, NGOs and various Government departments.

老先生在加入生產力局之前,曾在國際著名資訊科技顧問公司任職十多年。他現為商務及經濟發展局「零售業人力需求管理科技應用支援計劃」評審委員會主席、香港職業訓練局「資訊科技訓練發展委員會」委員、社會福利署「資訊科技聯合委員會」委員、香港工業總會「科技發展委員會」顧問、香港總商會「數碼資訊及電訊委員會」委員及香港電腦學會理事會理事。

老先生具備資訊科技專業人員認證 (項目總監)。他獲取英國倫敦大學理學碩士學位及帝國學院文憑,於 1997 年加入香港生產力促進局。

Prior to joining HKPC, Mr Lo worked in international IT companies for more than ten years. He is currently Vetting Committee Chairman of Retail Technology Adoption Assistance Scheme of the Commerce and Economic Development Bureau; member of Committee of IT Training and Development of Vocational Training Council; member of Joint Committee on Information Technology for the Social Welfare Sector of Social Welfare Department; advisor of Technology Development Committee of Federation of HK Industries; member of Digital, Information and Telecommunications Committee of Hong Kong General Chamber of Commerce and council member of Hong Kong Computer Society.

Mr Lo is a Certified Professional IT Project Director (CPIT(PD)). He obtained a Diploma of Imperial College and a Master of Science degree from University of London. Mr Lo joined HKPC in 1997.











副總裁(機構事務) Director, Corporate Services

林植廷先生曾於私人機構服務,其後於 1991 年加入政府出任政務主任,在加入 香港生產力促進局前已擁有近 20 年公共 行政經驗。

Having worked in the private sector, Mr Tony Lam joined the civil service as an Administrative Officer in 1991 gaining some 20 years of experience in public administration before joining the Hong Kong Productivity Council.

林先生曾參與策劃及推行各個不同範疇的公共政策,他的經驗涵蓋衛生保健,市政服務和公共安全政策,此外,他亦曾參與在工業、貿易、創新和科技發展的政策工作。

在加入香港生產力促進局之前,林先生參與了策劃和落實幾項大型跨境交通基建項目,包括港珠澳大橋、廣深港高速鐵路和港深機場聯絡線。

林先生畢業於香港大學,獲社會科學學士 (榮譽) 學位,並於 2009 年 8 月出任香港生產力促進局副總裁 (機構事務)。

Over the years, Mr Lam has been involved in the formulation and implementation of public policy in a very wide range of areas. His experience covers health care, municipal services and public security. Additionally, he has also been involved in the policy areas of industry, trade, innovation and technology development.

Prior to joining the Hong Kong Productivity Council, Mr Lam participated in the planning and implementation of several cross-boundary mega transport infrastructures including the Hong Kong–Zhuhai–Macao Bridge, the Guangzhou–Shenzhen–Hong Kong Express Rail Link and the Hong Kong–Shenzhen Airport Rail Link.

Mr Lam graduated from the University of Hong Kong with a Bachelor of Social Sciences (Honours) Degree. He joined HKPC as Director, Corporate Services, in August 2009.







方湛樑

Mr Raymond Fong 環境管理部總經理 General Manager Environmental Management Division



李國強 **Mr Thomas Lee** 智能製造及材料科技部總經理 General Manager Smart Manufacturing and Materials Division











MARKETING

Mr Wilson Wong 資訊科技及業務流程部總經理 General Manager IT and Business Process Division



何香凝 Ms Lilian Ho 人力資源及行政部總經理 General Manager Human Resources and Administration Division

林芷君 Ms Vivian Lin 財務及採購部總經理 General Manager Finance and Procurement Division





何富豪 Mr Jonathan Ho 企業傳訊及市務部總經理 General Manager

Marketing Division

Corporate Communication and

陳偉業 Mr Gilbert Chan 內地業務總經理 General Manager Mainland Business



RISK MANAGEMENT



附屬公司

Subsidiaries



生產力 (控股) 有限公司及珠三角的獨資企業 Productivity (Holdings) Limited and Wholly Foreign Owned Enterprises in the PRD

生產力(控股)有限公司成立於2003年7月28日,為珠三角區內港資企業提供橫跨價值鏈的綜合支援,協助企業提升卓越生產力。

The Productivity (Holdings) Limited was established on 28 July 2003 with the objective to promote productivity excellence through the provision of integrated support across the value chain of Hong Kong firms operating in the Pearl River Delta (PRD).

為了達成上述目標,生產力(控股)有限公司分別於2003及2004年在珠三角成立了生產力(廣州)諮詢有限公司、生產力(東莞)諮詢有限公司及生產力(深圳)諮詢有限公司等三家獨資企業。

This objective is achieved through incorporating 3 Wholly Foreign Owned Enterprises (WFOEs) in the PRD, namely Productivity (Guangzhou) Consulting Co. Ltd., Productivity (Dongguan) Consulting Co. Ltd., and Productivity (Shenzhen) Consulting Co. Ltd. in 2003 and 2004.

生產力(控股)有限公司 Productivity (Holdings) Limited

董事局

Board of Directors

劉展灝(董事局主席)、麥鄧碧儀、伍志強、蔡淑嫻、楊悰傑

Mr Stanley Lau (Chairman of the Board), Mrs Agnes Mak, Mr Victor Ng, Ms Annie Choi and Dr Jack Yeung

生產力(廣州)諮詢有限公司

Productivity (Guangzhou) Consulting Co. Ltd.

生產力(東莞)諮詢有限公司

Productivity (Dongguan) Consulting Co. Ltd.

生產力(深圳)諮詢有限公司

Productivity (Shenzhen) Consulting Co. Ltd.

董事局

Board of Directors

林植廷(董事局主席)、林芷君、老少聰、麥鄧碧儀、張梓昌、譚錫榮

Mr Tony Lam (Chairman of the Board), Ms Vivian Lin, Mr Gordon Lo, Mrs Agnes Mak, Dr Lawrence Cheung and Mr Alfonso Tam

截至 2016 年 3 月 31 日 As at 31 March 2016

生產力科技 (控股) 有限公司 HKPC Technology (Holdings) Co. Ltd.

生產力科技(控股)有限公司在2004年9月1日成立,以協助生產力局將具有市場潛力的專利、技術及項目成果轉化為商品。該公司為研發成果提供直接有效的商品化平台,致力促進香港發展科技密集的經濟活動。

HKPC Technology (Holdings) Co. Ltd. (HKPCT) was established on 1 September 2004 as a vehicle for the commercialization of HKPC's patents, technologies and project deliverables with market potential. The Company aims to develop a new technology-based generation through providing a more direct and effective avenue to turn R&D deliverables into products.

生產力科技(控股)有限公司在本年度成功透過 授權把兩項科技商品化,包括將廚餘轉化為肥 料的高效廚餘轉化技術,以及去除燃燒冥鏹煙 霧微粒的「清煙」環保化寶爐。

During the year, HKPCT successfully commercialized 2 technologies developed via licensing. These included a food waste conversion system to transform food waste into organic fertilizers and a smoke controlled paper artifacts furnace to remove smoke particles and fumes during burning of joss paper and artifacts.

董事局

Board of Directors

劉展灝、李國本、麥鄧碧儀、蔡淑嫻、楊悰傑

Mr Stanley Lau (Chairman of the Board), Dr Delman Lee, Mrs Agnes Mak, Ms Annie Choi and Dr Jack Yeung

財務報告



Financial Review

香港生產力促進局及其附屬公司全年截至二零一六年三月三十一日止的綜合賬目經由外部核數師「羅兵咸永道會計師事務所」審計,並獲發無保留審計意見書。綜合資產負債表、綜合收支賬目及綜合全面收益表載於後頁。

The consolidated accounts for the year ended 31 March 2016 of Hong Kong Productivity Council and its subsidiaries have been audited by the external auditor (PricewaterhouseCoopers) with a clean audit opinion and extracts of the Consolidated Balance Sheet, Consolidated Income and Expenditure Account and Consolidated Statement of Comprehensive Income are set out in the following pages.



「獨立核數師報告及財務報告」全文可於生產力局網站下載:www.hkpc.org

The full text of the "Independent Auditor's Report and Financial Statements" is available on HKPC's website at www.hkpc.org





綜合資產負債表 Consolidated balance sheet

於 2016 年 3 月 31 日 as at 31 March 2016 (以港幣為單位 Expressed in Hong Kong dollars)

		2016	2015
非流動資產 固定資產 無形資產 於非控制全資公司的投資 聯營公司權益 按金	Non-current assets Fixed assets Intangible assets Investment in a non-controlled wholly-owned entity Interest in an associate Deposits	\$ 199,212,611 10,032,768 - 1,512,350 -	\$ 196,252,828 11,549,265 10,000 1,514,930 4,463,335
		210,757,729	213,790,358
流動資產 應收賬款、預付款項及按金 銀行存款及現金	Current assets Accounts receivable, prepayments and deposits Cash at bank and on hand	\$ 60,151,964 290,961,515	\$ 55,622,700 264,945,175
		351,113,479	320,567,875
流動負債 應付賬款及應計費用 應付聯營公司款項 應付税項	Current liabilities Accounts payable and accruals Amount due to an associate Current taxation	\$ 236,702,456 779,593 141,638	\$ 211,946,106 812,536 137,410
		237,623,687	212,896,052
流動資產淨值	Net current assets	\$ 113,489,792	\$ 107,671,823
淨資產	NET ASSETS	\$ 324,247,521	\$ 321,462,181
生產力局應佔資本資助金 及儲備	Capital subvention fund and reserves attributable to the Council	\$ 323,057,163	\$ 320,372,049
非控股股東權益	Non-controlling interests	1,190,358	1,090,132
總資金	TOTAL FUNDS	\$ 324,247,521	\$ 321,462,181





綜合收支賬目 Consolidated Income and Expenditure Account

截至 2016 年 3 月 31 日止年度 for the year ended 31 March 2016 (以港幣為單位 Expressed in Hong Kong dollars)

		2016	2015
收入 經常性活動的政府資助 服務收入 其他收入 應佔聯營公司利潤	Income Government subvention for recurrent activities Service income Other income Share of profit of an associate	\$ 214,512,811 437,111,440 7,924,967 59,824	\$ 206,554,676 399,795,215 10,732,642
		\$ 659,609,042	\$ 617,082,533
支出 職員薪俸 其他支出 應佔聯營公司虧損	Expenditure Staff emoluments Other expenses Share of loss of an associate	(357,225,762) (299,153,266)	(343,504,002) (269,024,460) (1,489)
		\$ 3,230,014	\$ 4,552,582
所得税	Income tax	(436,909)	(955,147)
		2,793,105	3,597,435
從資本資助金轉入	Transfer from capital subvention fund	24,901,800	32,682,611
年內盈餘	Surplus for the year	\$ 27,694,905	\$ 36,280,046
歸屬於 : 生產力局 非控股股東權益	Attributable to: The Council Non-controlling interests	\$ 27,548,101 146,804	\$ 35,969,380 310,666
		\$ 27,694,905	\$ 36,280,046







綜合全面收益表 Consolidated Statement of Comprehensive Income

截至 2016 年 3 月 31 日止年度 for the year ended 31 March 2016 (以港幣為單位 Expressed in Hong Kong dollars)

		2016	2015
年內盈餘	Surplus for the year	\$ 27,694,905	\$ 36,280,046
年內其他全面收益	Other comprehensive income for the year		
可能於其後重新歸類至收支 賬目的項目	Item that may be reclassified subsequently to income and expenditure account		
換算中華人民共和國 (「中國」)業務賬目的 匯兑差異	Exchange differences on translation of financial statements of operations in the People's Republic of China ("PRC")	(7,765)	(259,603)
年內全面收益額	Total comprehensive income for the year	\$ 27,687,140	\$ 36,020,443
來自: 生產力局 非控股股東權益	Attributable to: The Council Non-controlling interests	\$ 27,586,914 100,226	\$ 35,715,108 305,335
年內全面收益	Total comprehensive income for the year	\$ 27,687,140	\$ 36,020,443





你好,我是 Biz, 看我的身體多圓滑! Hi, I'm Biz, see how smooth my body is!

本年報的特別版本附送兩個 3D 打印的生產力局代言人物一Tec 和 Biz,由生產力局全港首個提供一站式 3D 打印服務的「3D 打印體驗廊」以一體成型方式製造。它們的光滑表面、透明眼鏡及不同顏色的細節,展現出「3D 打印體驗廊」可提供專業的顧問服務,以及高精度、多色、多物料 3D 打印服務,協助企業快速製作高度像真的模型和零件。

- 多達 36 萬種顏色
- 單一成品包含不同材料 一 由軟性到硬性,由實色到透明
- 超高解析度達 0.014 毫米 (14 微米)

The VIP edition of this Annual Report comes with two 3D printed HKPC mascots, Tec and Biz, fabricated by HKPC's "3D Printing One", the first one-stop 3D printing support centre in Hong Kong. The fine finishing, transparent glasses and colourful details of the figurines showcase the capabilities of "3D Printing One" in helping enterprises rapidly produce realistic models or parts through professional consultancy and 3D printing services featuring a vast array of colours, materials and material properties.

- 360,000 different color shades
- Multiple material properties from rigid to flexible and opaque to transparent
- Ultra-high layer resolution up to 0.014 mm (14 micron)



幕後製作… The Making Of … 注意! 小童錯誤吞下塑像, 會對身體造成傷害,包括窒息 或腸道阻塞,兩者皆可致命。

Warning! The figurine poses a potential hazard including asphyxia and gastrointestinal obstruction, which can be fatal, if it is swallowed by children.



你好,我是 Tec, 看我的藍色護眼罩 多漂亮、多通透!

Hi, I'm Tec, see how beautiful and transparent are my goggles!



為消滅本印刷品對全球氣候變化的影響,生產力局環境管理部顧問對 本年報的印刷及分發過程進行碳足印分析,並以碳額度抵銷碳排放量。

To minimize the impact of this publication on global climate change, HKPC's environmental management consultants have performed a carbon footprint analysis on the printing and distribution of this annual report. The total carbon emission is offset by means of carbon credits.

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