緣化平台 GREEN DECK

綠化環境活化社區 A Catalyst for a GREEN & Vibrant Community



香港理工大學(理大)自1957年起札根紅磡,在過去60多年來,一直見證這個地區的變化和發展。舊式的城市規劃及鄰近地區人口和經濟活動的急速增長帶來了許多問題:交通擠塞、空氣和噪音污染、地區分割、缺乏空間等等。現時,不僅理大3萬多名員生覺得情況有欠理想、在鄰近社區生活的居民,以及每天進出該區的公眾,亦會渴望環境得以改善。一向重視可持續發展的理大,正致力尋求一個創新方案去活化鄰近地區。

Located at Hung Hom since 1957, The Hong Kong Polytechnic University (PolyU) has been witnessing the changes and development in this area over the past 60 years. The outdated urban planning model, rapid growth in population and economic activities in nearby districts have brought along many teething problems: heavy traffic, air and noise pollution, poor connectivity, lack of open space and many others. Not only the 30,000+ staff and students of PolyU consider the situation less than satisfactory, the nearby communities and the daily commuters are also looking forward to having improvement in their environment. PolyU, a university which cherishes a sustainable future, is committed to finding an innovative solution to revitalize the districts.





現有問題 Existing Problems

- ★ 公共空間不足 Insufficient public space
- × 交通擠塞和空氣質素有欠理想 Heavy traffic and poor air quality
- ★ 巴士候車區擠塞及空氣污濁 Congested and polluted bus waiting area
- ★ 地區往來不便 Poor connection within the districts
- ★ 行人天橋遠超負荷 Overloaded footbridge







創新方案 改善環境 An innovative solution to enhance the environment

理大以「開物成務 勵學利民」為校訓,一直致力開拓創新,以期為社會帶來正向改變。為了解決紅磡舊區的問題,以及活化鄰近社區,理大在 2012 年提出了綠化平台的構思,並於 2013 年中委託顧問公司進行可行性研究,結果令人十分鼓舞,大學隨即廣泛諮詢社會各界人士,並展開多項相關的科研項目。

With "To learn and to apply, for the benefit of mankind" as its motto, PolyU is committed to blazing new trails and bringing positive changes to society. In order to solve the problems faced by Hung Hom old district and to revitalize the nearby districts, PolyU initiated the Green Deck idea in 2012 and engaged a consultant in mid of 2013 to conduct a feasibility study. With the encouraging findings, the University has embarked on extensive community engagement exercise and a wide variety of related research.





扭轉劣勢 向「綠」出發 Turning Grey to Green







擬建的綠化平台位於紅磡海底隧道收費廣場上方,由理大北端伸延至尖東海傍,與校園平台及地鐵紅磡站連接起來。平台約有43,000平方米的用地,可為鄰近社區、經過該區的公眾人士及各持分者提供一個備有文化、休閒及體育設施的綠化公共空間。此外,綠化平台有助改善鄰近地區的通達性,行人往來紅磡、尖東、何文田、京士柏及佐敦一帶更感方便,除了行人通道,綠化平台亦可提供單車徑,鼓勵市民使用環保的單車出入。

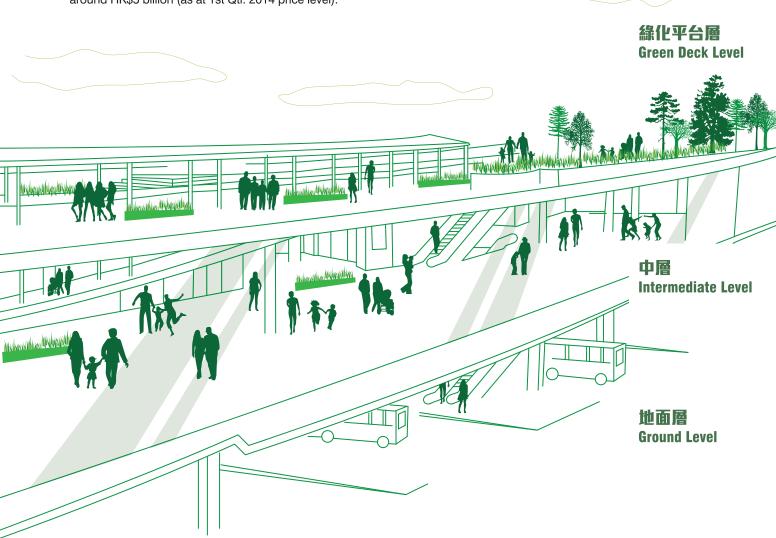
Situated over the existing Cross-Harbour Tunnel Toll Plaza, the proposed Green Deck will stretch from the northern tip of PolyU campus to the Tsim Sha Tsui East harbour front, connecting the podium of the PolyU campus with that of the MTR Hung Hom Station. With a deck area of around 43,000 sqm., it is intended to provide a green open space with cultural, leisure and sport facilities and amenities for the local communities, commuters and different stakeholders. In addition, the Green Deck will significantly enhance the pedestrian connectivity amongst the nearby districts: Hung Hom, Tsim Sha Tsui East , Homantin, King's Park and Jordan. Other than pedestrian walkways, cycle tracks can also be provided to encourage environmentally friendly commuting.

分層設計 各具功能

Functional Design for Each Storey

擬建的綠化平台分為三層,頂層為園林公園,以及文化、休閒和體育設施;地面層如常供過海車輛使用;而中層為全天候樓層,供行人往來流通、作為巴士候車室、以及存放機電設施之用,另有約30,000平方米的室內空間,可作展覽或零售等多種用途。項目的預計建造成本約為50億港元(2014年第1季價格水平)。

The proposed Green Deck has three levels. The landscaped park, cultural, leisure and sport facilities will occupy the top level, while the ground level will remain to serve cross harbour traffic. The intermediate level is planned for weather protected pedestrian circulation, bus waiting lounges, mechanical and electrical service areas. In addition, there will be about 30,000 sqm. of indoor space for a variety of uses such as conventions or retail. The estimated cost of construction of the Green Deck is around HK\$5 billion (as at 1st Qtr. 2014 price level).



科研理據 Academic Research

在過去幾年,超過 100 名理大學者參與了各項相關的應用研究,確認綠化平台計劃是可持續發展的一個明智選擇。

Over 100 PolyU academics have been involved in a number of related practical research in the past few years and the research findings has confirmed that the Green Deck is an obvious choice for a sustainable future.



一項有關行人流通的研究顯示,緣化平台能夠大大改善當 區的行人流通情況及使分離的社區相互連結起來。

A study on the pedestrian circulation reveals that the Green Deck would significantly improve the pedestrian circulation within the area and effectively link the nearby segregated communities.



一項有關環境噪音的研究顯示,裝置了噪音緩減措施的 綠化平台,將有助降低理大及毗連港鐵紅磡站及香港體育 館等地區所感受到的行車聲浪。

A research on the noise environment confirms that with proposed noise mitigation measures, the proposed Green Deck will be able to reduce the traffic noise level at PolyU and locations nearby the MTR Hung Hom Station and the Hong Kong Coliseum.



三項有關空氣質素的研究顯示,緣化平台連同擬建的 車輛排放物處理系統將有效地提升區內的整體空氣質素 和通風程度。

Three research related to air quality confirm that with the proposed Green Deck and the exhaust emission treatment systems, the overall air quality and ventilation will be greatly enhanced.









一項有關綠化環境的研究顯示,公園或綠化天台將有效地 減低環境溫度,以及紓緩城市的熱島效應。

The research on the effect of greenery confirms that parks or green roof can effectively help lower temperature and mitigate urban heat island effect.



我們的目標是要興建一個「淨零能量」和「零溫室氣體排放」的綠化平台,相關研究確認了只要綠化平台裝置了 PV 板和 PV 地磚,便可實踐這個目標。

We target to build a net-zero-energy consumption deck with zero greenhouse gas emission. Our study confirms that this is possible with the use of PV panels and PV floor tiles.



研究顯示,循環使用棄置玻璃物料建構綠化平台,除了可以減少數以噸計的棄置玻璃外,循環再生物料中的空氣靜化、自動清潔及抗微生物的特質,對改善環境質素帶來重要效益。

Eco-glass architectural construction material will be used in the proposed Green Deck. Our research reveals that this does not only help recycle tons of waste glass, the airpurifying, self-cleaning and anti-microbial properties of the recycled materials will significantly benefit the environment.



大學亦就綠化平台對社會及經濟的影響進行多項研究,並就項目的成本效益作出分析。結果令人鼓舞。綠化環境除了減少癌症和其他慢性疾病的風險,亦可鼓勵公眾人士多走路、多運動,享受更健康的生活。這個項目將會對六大群組帶來裨益,包括居民、遊客、當地商業社區、每天經過該區的公眾人士、活動參加者,以及理大員生,因此,對公眾而言,這是一項相當有意義的投資項目。

A number of research on the social, economic and related impact of the proposed Green Deck and some costbenefit analysis have been conducted. The findings are very positive. Apart from reducing the risk of cancer and other chronic illness, the green environment will facilitate people to walk and exercise, thus leading a healthier life. In addition, the project will, in one way or the other, benefit six major user groups, namely the local residents, tourists, local business communities, daily commuters, event attendees and academic community at PolyU, and hence a beneficial investment to the public.

社區參與 Community Engagement

自 2013 年初開始,理大透過各種渠道,包括宣傳單張、網頁、 論壇、簡介會、演講、展覽、Facebook 訊息等,向政府官員、 區議會、地區領袖、企業、專業團體、環保組織、學生和居民 介紹是項構思,雖然有部份人士對發展成本、建築難度,以及 工程對紅隧交通的影響等表示關注,但整體而言,反應都是十 分正面。我們會參考有關意見,以便日後用作優化計劃之用。

Starting from early 2013, PolyU has been engaging government officials, district councils, community influential, businesses, professional groups, green groups, students and residents nearby via a wide variety of programs, such as leaflet, website, forums, briefings, presentations, exhibitions and Facebook feeds, etc. The Green Deck initiative has received overwhelming support with many positive inputs, although some have expressed concern mainly on the cost, constructability and interference on cross harbour traffic. We will make reference to those suggestions to further enhance our proposal.

持份者的意見 The Stakeholders' Feedback

"在綠化平台加建行人通道,有助為紅磡比較沉悶的生活環境 注入活力,建立更多樣化的社區。"

市區重建局前行政總監譚小瑩女士

"The proposed Green Deck with appropriate pedestrian connections could inject vibrancy into the less active neighbourhoods in Hung Hom, and help building more diverse communities."

Ms Iris Tam, Former Managing Director of Urban Renewal Authority

"除了綠化功能外,綠化平台可拓展至文化和旅遊用途。"

規劃署前署長潘國城博士

"Apart from greening, the proposed Green Deck can be developed for cultural and tourism uses."

Dr Peter Pun, Former Director of Planning Department

"方案非常具有創意!除了善用土地之外,亦改善現時的環境 噪音和空氣質素,實在找不到不支持這個計劃的理由。"

立法會發展事務委員會前主席謝偉銓先生

"The proposal is very creative! It can maximize the land utilization, while improve the existing noise impact and air quality. There is no reason of not supporting the project."

Mr Tony Tse, Former Chairman of Panel on Development, Legislative Council

"除了美學外,還必須考慮城市生態與自然之間的關係。舉例而言,九龍公園可以成為一個城市綠洲,為昆蟲和鳥類提供一個棲息地。"

建築環保評估協會主席伍灼宜教授

"Apart from aesthetics, it is also essential to consider the relationship between urban ecology and nature. For instance, Kowloon Park can serve as an urban oasis to provide a habitat for insects and birds."

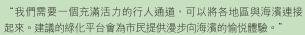
Prof. John Ng, Chairman of BEAM Society Ltd.

"綠化平台不僅作為一個普通平台,更重要的是,它讓公眾 人士更容易享用公共活動空間,以及健康的生活模式。"

香港城市設計學會創會會長林雲峰教授

"The proposed Green Deck does not only serve as a deck but, more importantly, provides us with great accessibility to public open space and healthy lifestyle."

Prof. Bernard Lim, Founding President of Hong Kong Institute of Urban Design



海濱事務委員會非官方成員吳永順先生

"We need a vibrant pedestrian connection between the communities and harbourfront. The proposed Green Deck can provide public with joyful experience walking towards the harbourfront."

Mr Vincent Ng, Non-official Member of Harbourfront Commission

"我的孩子在學習騎單車時有困難,因為區內跟本沒有單車徑或 單車公園,我們每次都需要長途跋涉去大埔。我們十分期待綠化 平台可以提供單車及兒童遊樂設施。"

一名當地居民

"It is very difficult for my children to learn cycling as there is no cycle track and cycle park in the community and we need to go to Tai Po for cycling every time. It would be great if the Green Deck can provide cycling and child recreational facilities."

A local resident

"除了綠化,綠化平台應包括智能和適應力強的設計,如信息科技和舒緩熱島效應的措施。公眾期望項目能夠為氣候變化作出積極 貢獻,並作為典範,帶動香港成為一個智能的綠色城市。"

奧雅納工程顧問董事劉偉棠先生

"Apart from greening, the Green Deck should include smart and resilient design such as information and communications technology and heat island mitigation measures. There is public aspiration on the Green Deck to positively contribute to climate change and serve as an example to motivate Hong Kong to become a smart green resilient city."

Mr Wilfred Lau, Director of Arup

"我非常欣賞綠化平台項目!我原先以為這是一個不可能的計劃,但現在我相信這個項目是高度可行的。建議的綠化平台可以解決行人天橋擠塞,以及綠化文娛空間不足的問題。因此,我相信計劃會得到居民的支持。如果項目獲得市民、區議會和立法會的支持,政府應該擔當項目的主要投資者。"

九龍城區議會張仁康議員

"I appreciate the Green Deck project very much! I originally thought it was an impossible plan but now I believe this project is highly implementable. The proposed Green Deck is a solution to the congested footbridges and insufficient green and recreational space. Therefore, it will be supported by the local residents. In case the project has the support of the public, district councils and legislative council, the Government should serve as the major investor." Ir Cheung Yan-hong, Member of Kowloon City District Council

" oneang fair hong, member of homeon only blanct country

"綠化平台建造期間,只需佔用每個方向各一條行車通道。 採用預製構件,可以加快施工時間。"

金門建築執行董事余世欽先生

"The construction of Green Deck will only occupy two traffic lanes, one lane for each direction. With the use of prefabricated components, the construction time can be speeded up." Mr Yu Sai-yen, Executive Director of Gammon Construction

發展潛力:香港全新的會議中心

A Potential Location for a New Conference Centre for Hong Kong



擬建的會議中心可為旅遊、會議及 展覽業界帶來協同效應 Synergy impact brought about by the proposed conference centre to tourism, convention and exhibition sectors

何文田 Homantin 紅磡舊區 Huna Hom TST East old district 港鐵紅磡站 MTR Hung Hom 海港 Waterfront Expansion 延伸 鐵路通道 水路涌道 (港鐵沙中線) Railway connection Marine (MTR Shatin to Central Link) 港鐵會展站 MTR Exhibition Station 銅鑼灣 Causeway Bay Central Wan Chai

"尖東/紅磡是一個主要的交通樞紐,經鐵路和道路便可接駁至各個社區。綠化平台連同毗鄰的酒店群及具標誌性的維多利亞港,為重新活化該區成旅遊熱點提供良好的基礎。當港鐵沙中線落成後,綠化平台的位置與香港會議展覽中心只有一站之距,所以該處亦具有潛質作重新發展,以提供空間容納一個全新的世界級會議中心,作為舉行大型會議、商務會議和許多其他活動之用。"

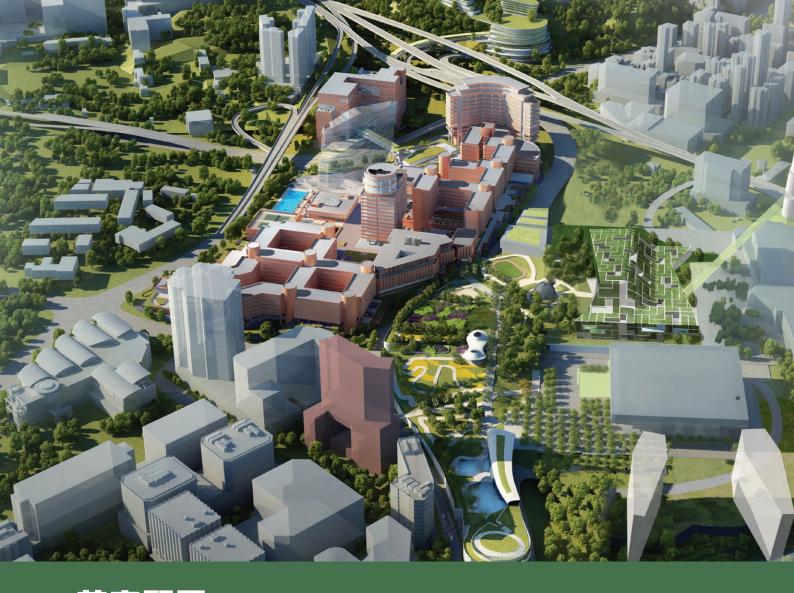
"The Tsim Sha Tsui East/Hung Hom area is a key transport hub with good connectivity to other districts by both rail and road. The Green Deck, together with the nearby hotel cluster and the iconic Victoria Harbour, provides a good foundation for re-invigorating the neighbourhood into a tourist hotspot. Since the area will be just one stop from the Hong Kong Convention and Exhibition Centre on the new MTR Shatin to Central Link, it also has the potential to be redeveloped to provide space for hosting a new world class convention centre for large conventions, business meetings, and many other activities."

香港旅遊發展局總幹事劉鎮漢先生 Mr Anthony Lau, Executive Director of Hong Kong Tourism Board

"香港極需要一個全新的大型會議中心,港鐵紅磡站將會是一個理想的位置,因為它與未來的港鐵會展站只有一站之距。這個四通八達的綠化平台項目,因為能夠方便市民往來鄰近地區,因此可以增加旁邊土地的商業價值,並且可以將從前被孤立的社區活化起來。"

"There is a strong need for a new sizable exhibition centre in Hong Kong and MTR Hung Hom Station will be an ideal location as it is only one station away from the future MTR Exhibition Station. Besides, with accessible and effective links to adjacent sites, this transit oriented deck development will increase the commercial value of adjacent lands and enable urban regeneration in those previously isolated areas."

黃山建業事務所物業顧問公司 董事總經理黃山先生 Mr Samson Wong, Managing Director of Samson Wong & Associates Property Consultancy Ltd.



落實願景 **Translating Vision into Reality**

雖然綠化平台是一個以地區為本的項目,但由於它規模宏大, 並需涉及龐大資源,如果要落實項目,政府的參與是必須的。 我們會繼續與政府和社會大眾進行討論,期盼有一天能落實這個 「啟迪思維 • 成就未來」的社會創新項目。

While the Green Deck is a community based project, the involvement of the government is a must given its mega scale and resources involved if we want to take this project forward. We will continue to engage the government and the wider community with a view to bringing this "Opening Minds · Shaping the Future" social innovative project into reality.

你的意見至為重要,請電郵至:

Your views count! Please send them to:

views.on.greendeck@polyu.edu.hk





www.polyu.edu.hk/cpa/greendeck/report



Green Deck Video

www.polyu.edu.hk,



Green Deck Leaflet

www.polyu.edu.hk/