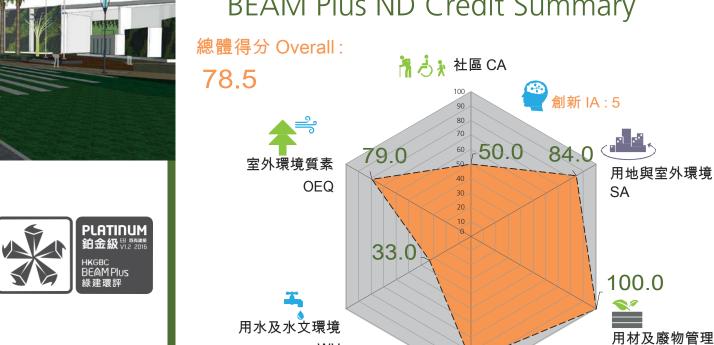
機電工程署最近獲得「綠建 環評社區類別最終鉑金級評 級」。下列是有關認證工作 的詳情,我們很高興與大家 分享。

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# 綠建環評社區評估得分摘要 BEAM Plus ND Credit Summary



# 鉑金級評級的成功關鍵 Key Success Factors for Platinum Rating

能源使用 EU

**MWA** 

公共綠化空間約佔 9%面積 Nearly 9% of publicly accessible open/green space

設有蓋行人通道前往公共廣場 Covered pedestrian pathway leading to piazza

整個範圍限制車速不高於每小時 20 公里確保交通安全 Traffic speed at all open spaces is limited speed to 20 km/hr for complete safety

項目設計概念和原則完全符合「城市設計指引」 Design principle and concept fully comply with "Urban Design Guideline"

增加可透水材料覆蓋廣場路面面積於 50 年一遇的暴雨下 可減少 14%地面徑流

Reduce surface runnoff by about 14% runoff under rainstorms of a 50-year return period

整個公共空間透過被動式設計滿足熱舒適需求 All open spaces are achieving thermal comfort by passive design

回收 35%中水作灌溉用途 Recycle 35% of grey water for irrigation

可再生能源佔大樓全年秏電量超過2%

Over 2% annual energy from renewable energy source

千瓦時的電量,相當於約300個住宅用戶的用電量 Annual electricity consumption reduction of 1,700,000kWh by connecting Kai Tak District Cooling System, equivalent to electricity use of 300 residential units in Hong Kong

連接啓德發展區區域供冷系統為大樓全年節省達 1,700,000











綠建環評社區評估重點 BEAM Plus Neighbourhood (ND) highlights

目標:成為九龍東的一個綠色景 點,推廣低碳建築,向市民提供 多元化的環保資訊

Objective: to be one of the Green Check Points of Kowloon East to promoting low carbon buildings and providing diversified environmental friendly information to the public

首個獲得綠建環評社區類別先導 計劃鉑金級評級的政府改造工程 1st BEAM Plus Neighbourhood

Pilot Platinum Government Transformation Project









## 機電工程署總部綠化改造工程榮獲 綠建環評社區類別先導計劃 鉑金級評級資料概覽

Transformation of EMSD Headquarters into a Green Building **Attaining Platinum Rating** in BEAM Plus Neighbourhood (ND) Pilot Certification **Fact Sheet** 

> 機電工程署最近獲得「綠建環評社區類別先導計劃鉑金級評級」。 下列是有關認證工作的詳情,我們很高興與大家分享。

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## 綠建環評社區類別評估目標

綠建環評社區評估工具在發展項目初期,從整體出發,評估項目的可持續發展表 現,並為城市的可持續發展訂下綱領,令隨後各發展階段事半功倍。評估工具顧 及樓宇之間空間的設計規劃,並着重發展項目涉及的社會經濟元素。

## 主要綠化改造工程項目

- 連接啟德發展區區域供冷系統,以減低空調系統的能耗
- 盡量提高大樓和廣場的綠化,以緩減熱島效應
- 翻新教育徑,透過展示和教育,鼓勵市民認識和建立可持續生活方式
- 制定綜合廢物管理計劃,以減少城市固體廢物
- 在大樓有蓋行人通道裝設建築一體化光伏系統,以推廣可再生能源技術
- 提供太陽能風力路燈、草坪、垂直綠化及雨水收集系統等

## 可持續性發展成就

## 社區

- 匯聚員工共同參與項目的總體規劃
- 以具本地特色的綠色設計推動公共廣場成為標記予公眾享用
- 作為九龍東地區的綠色景點之一大力宣揚低碳建築設計
- 向公眾推廣環保設計和科技
- 翻新教育徑,透過展示和教育,鼓勵社區及市民認識和建立可持續生活方式

## 用地與室外環境

- 提供接近 2,400 平方米 (佔 8.6%地面積達)的優質休憩公共空間
- 採用多元種類植物美化戶外公共空間,增加生態價值

## 用材及廢物管理

針對消耗性廢物及有機廢物制定包括收集、分類、轉移及處置城市固體 廢物,的綜合廢物管理計劃以減少送往堆填廢物

- 全港首幢現有大樓連接啟德發展區區域供冷系統
- 計劃提供太陽能樹、薄膜太陽能系統、太陽能風力路燈、 太陽能水泵、太陽 能路面等

## 用水和水文環境

增加可透水材料覆蓋廣場路面面積,在50年一遇的暴雨下減少14%地面徑流

## 室外環境質素

- 被動式設計具熱舒適度的公共空間
- 大樓內外進行垂直綠化,提高生態價值
- 大樓使用區域供冷系統及在廣場大量綠化和水耕種植,減低熱島效應

## Purpose of the BEAM Plus ND Scheme:

BEAM Plus Neighbourhood adopts a more holistic approach to assessing sustainability performance at the early or inception stage of a development project. It helps lay down a broader framework of urban sustainability for a smoother implementation of the principles in the subsequent development stages. The tool concerns the design of space between buildings and places an emphasis on socio-economic elements of a development.

## Major transformation items

- \* Connect to Kai Tak District Cooling System to reduce energy consumption of space cooling
- Maximize the greenery in building and Piazza to reduce the urban heat island effect Revamp the Education Path to showcase, educate and encourage sustainable lifestyle to
- the public \* Develop Integrated Waste Management Plan for municipal solid waste reduction
- \* Provision of building-integrated PV system at the covered walkway for promotion of renewable energy technologies Provision of wind and solar powered lamps, lawn, vertical greening, rainwater

## Sustainability Achievement

#### Community Aspects (CA)

harvesting system, etc.

- Engaged our staff in developing the master plan of the project
- Our green features have their local characters and make the piazza a place for public
- To perform as one of the Green Check Points of Kowloon East to promote low carbon building design
- Promote environmental friendly features/technologies to the public
- Revamp of Education Path to showcase and encourage sustainable lifestyle to the neighbor and public

## Site Aspects (SA)

- Provision of around 2,400m2 (or 8.6% of site area) quality leisure and open space The public open space will be landscaped with mixed species of plants to enhance
- ecological value

## Materials and Waste Aspects (MWA)

Implement of Integrated Waste Management Plan (IWMP) for ongoing consumables and organic waste. The Plan will cover collection, sorting, diversion, and disposal of municipal solid waste thus minimize landfilling waste

## Energy Aspects (EA)

- First existing building to converted to connect Kai Tak District Cooling System
- Planned to provide PV tree, thin film PV panel, solar and wind lamp poles, solar pump and solar paver in our development plan

## Water Aspects (WA)

Increase the permeable surface area in the Piazza to reduce the runnoff by about 14% runoff under rainstorms of a 50-year return period

## Outdoor Environmental Quality Aspects (OEQ)

- Open spaces with passive design to enhance thermal comfort
- Vertical Greening for internal and external walls to enhance ecological value
- Reduce heat island effect by connecting District Cooling System and addition of greenery in the Piazza and hydroponic farm









## 機電工程署總部綠化改造工程榮獲 綠建環評社區類別先導計劃鉑金級評級 資料概覽



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