

太陽能光伏板小知識 Something about the PV Panel

功率 Power

260 瓦 (Watts)

尺寸

約1.7 米(長)×1 米(闊)×0.006 米(厚)

Dimensions

Approx. 1.7m (L) \times 1m (W) \times 0.006m (T)

重量 Weight

23.5 公斤 (kg)

電池片數量 No. of cells

60

座向

向南傾斜 22 度

Orientation

(22° towards South)





變頂 **Awards**



香港丁程師學會 - 「2017 年度環境論文優異獎」 The Hong Kong Institution of Engineers - Certificate of Merit of 2017 **Environmental Paper Award**







公眾參觀 **Public Visits**

小蠔灣污水處理廠太陽能發電場現已接受團體預 約參觀。除了太陽能光伏設施,參觀者更可透過太 陽能發電場控制室內的展板及互動展品,了解更多 有關渠務署應用可再生能源的工作。

The Solar Farm is now open for group visits via prior application. Apart from the PV installations, visitors can also learn more about DSD's renewable energy initiatives from the display materials and interactive exhibits in the Solar Farm Monitoring Room.



如欲得到更多太陽能發電場的資訊。 請瀏覽本署網頁:

You may visit DSD website for more information about the Solar Farm:





小蠔灣污水處理廠 太陽能發電場 Solar Farm at Siu Ho Wan Sewage Treatment Works





渠務署

Drainage Services Department

渠務署一般查詢 DSD General Enquiries: 2877 0660 電郵 Email: enquiry@dsd.gov.hk 網頁 Website: www.dsd.gov.hk

二零一八年一月印製 Printed in January 2018

二零二零年五月修訂 Edited in May 2020





背景 Background

渠務署轄下有超過300所防洪及污水處理設施,日 常運作使用大量能源。為促進香港的可持續發展及 應對氣候變化,渠務署積極在新建及現有廠房設施 加入可再生能源及節能減排等元素。位於小蠔灣污 水處理廠的太陽能發電場,是現時政府設施中規模 最大的太陽能發電場。

Operating over 300 flood prevention and sewage treatment facilities in Hong Kong, the Drainage Services Department (DSD) is a large electricity consumer. In order to enable sustainable development of Hong Kong, as well as to combat climate change, DSD has actively adopted renewable energy and energy saving elements in its new and existing facilities. The Solar Farm at Siu Ho Wan Sewage Treatment Works (SHWSTW) is the largest of its kind among the government facilities.



工程 簡介 Description of the Project

- 發電場由超過 4,200 塊多晶硅太陽能光伏板組成, 總裝置發電容量達 110 萬瓦特
- 每年發電量可達 110 萬度,是現時廠房每年總用電 量約五分之一
- 發電場備有智能自動探測系統,能迅速及有效地檢 測和識別有問題的光伏板
- The Solar Farm comprises over 4,200 polycrystalline photovoltaic (PV) panels with an installed generation capacity of 1,100 kilowatts
- It can generate as much as 1.1 million kilowatt-hours of electricity annually which account for about 20 per cent of the current annual electricity consumption of the plant
- An intelligent automatic detection system is in placed to detect and identify faulty PV panels promptly and effectively



建造費用 Construction cost

約 2,700 萬元 About \$27 million 開展日期 Commencement date 2015年2月 February 2015 啟用日期 Commissioning date 2016年12月 December 2016



發電場每年產電量相等 於230個家庭一年的總 用電量,每年減少770 噸二氧化碳排放。

Annual electricity generation is equivalent



to the annual electricity consumption of about 230 households, thus help reducing 770 tonnes carbon dioxide emission per year.





