

Annex 2**Renewable Energy (RE) Power Generation Installations in Relevant Government Buildings and Infrastructures**

Name of Project	Type of RE installation	Year of Completion	Generating Capacity (kW)	Power Generation* (kWh)	Application of Power Generated by RE
Local open space at Chung Yee Street, Kowloon City	Photovoltaic system	2013/14	6	3 000	General Lighting and Power
Construction of fire station-cum-ambulance facility at Cheung Yip Street, Kowloon Bay	Photovoltaic system	2013/14	16**	5 000	General Lighting and Power
Redevelopment of Tai Lam Centre for Women	Photovoltaic system	2016/17	63**	25 000	General Lighting and Power
Public library and indoor recreation centre in Area 3, Yuen Long	Photovoltaic system	2015/16	23**	9 000	General Lighting and Power
Sports Centre and Community Hall in Area 101, Tin Shui Wai	Photovoltaic system	2012/13	47**	6 000	General Lighting and Power
Hydropower system for Tuen Mun Water Treatment Works	Hydropower system	2013/14 (Stage 1) & 2016/17 (Stage 2)	500	Stage 1: 1 500 000 Stage 2: 3 000 000	Grid-connected
Extension of Man Kam To food inspection facilities	Photovoltaic system	2012/13	16**	3 000	General Lighting and Power

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New Civil Aviation Department Headquarters	Photovoltaic system	2012/13	19	21 000	General Lighting and Power
Floating photovoltaic system at Shek Pik Reservoir	Photovoltaic system	2016/17	100	120 000	Grid-connected
West Kowloon Law Courts Building	Photovoltaic and wind power systems	2015/16	46**	50 000	General Lighting and Power
Sports centre, community hall and district library in Area 14B, Sha Tin	Photovoltaic system	2015/16	57**	11 000	General Lighting and Power
Relocation of part of the offices of the Department of Justice to the Main and East Wings of the Former Central Government Offices	Photovoltaic system	2014/15	25	25 000	General Lighting and Power
Reprovisioning of Wo Hop Shek Crematorium	Photovoltaic system	2012/13	8	6 000	General Lighting and Power
Reprovisioning of Cape Collinson Crematorium	Photovoltaic system	2014/15	2	3 000	General Lighting and Power
Redevelopment of Victoria Park Swimming Pool Complex	Photovoltaic system	2015/16	468**	39 000	General Lighting and Power
Redevelopment of Kwun Tong Swimming Pool Complex and Kwun Tong Recreation Ground	Photovoltaic system	2014/15	337**	15 000	General Lighting and Power

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Development of Aberdeen fire station-cum-ambulance depot	Photovoltaic system	2013/14	12**	9 000	General Lighting and Power
Redevelopment of Fire Services Training School	Photovoltaic and wind power systems	2015/16	98**	36 000	General Lighting and Power
Fanling Highway Noise Barriers photovoltaic system installation pilot programme	Photovoltaic system	2015/16	8.4	3 000	Lighting for Cycleway
Conversion of secondary pool of Lai Chi Kok Park Swimming Pool into indoor heated pool	Photovoltaic system	2012/13	54**	5 000	General Lighting and Power
Construction of an Annex Building at the Ko Shan Theatre	Photovoltaic system	2013/14	10	13 000	General Lighting and Power
Construction of Trade and Industry Tower in Kai Tak Development Area	Photovoltaic system	2015/16	46**	28 000	General Lighting and Power
Cruise terminal building and ancillary facilities for the Kai Tak cruise terminal development	Photovoltaic system	2013/14	61**	24 000	General Lighting and Power
Town park, indoor velodrome-cum-sports centre in Area 45, Tseung Kwan O	Photovoltaic system	2013/14	193**	150 000	General Lighting and Power
District open space, sports centre and library in Area 74, Tseung Kwan O	Photovoltaic system	2014/15	78**	20 000	General Lighting and Power

Name of Project	Type of RE installation	Year of Completion	Generating Capacity (kW)	Power Generation* (kWh)	Application of Power Generated by RE
Construction of rank and file quarters for Immigration Department at Wo Yi Hop Road, Kwai Chung	Photovoltaic system	2012/13	9	10 000	General Lighting and Power
Construction of a station for the new Terminal Doppler Weather Radar	Photovoltaic system	2014/15	2	4 000	General Lighting and Power
Photovoltaic system at Wan Chai No.2 Salt Water Pumping Station	Photovoltaic system	2014/15	11.7	13 000	Grid-connected
Kwun Tong promenade (Stage 2)	Photovoltaic system	2014/15	47	31 000	General Lighting and Power
RE installations of Drainage Services Department	Photovoltaic systems	Commissioned at 13 sewage treatment facilities (including sewage treatment works and sewage pumping stations) between 2012/13 and 2016/17	1 268	471 422	Equipment and plant energy consumption
	Combined heat and power (CHP)*** and micro-turbine generator systems	Commissioned at 3 major sewage treatment works between 2012/13 and 2016/17	2 310	7 200 000	

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T · PARK	Waste-to-Energy	2015/16	14 000	1 226 000 000	Support daily operation of the entire facility, with surplus electricity exported to public power grid

* The figures denote the estimation of annual power generation made during the design of the RE installations.

** The figures include the power saving from systems such as solar water heating.

*** CHP generators generate both electricity and heat. The above summary only sets out the electricity generation capacity of CHP generators and the amount of electricity generated.

Note 1: The maintenance of the RE power generation installations listed above is undertaken by the Electrical and Mechanical Services Trading Fund or the relevant departments owning the RE power generation installations (i.e. Water Services Department, Highways Department and Drainage Services Department). The contracts between the Trading Fund and Government departments have no separate breakdown for the maintenance of a particular facility. The Water Services Department and Highways Department regularly examine the installations (including the RE components) in the facilities under their management. There is no breakdown of the expenditure on maintenance of RE components. The Drainage Services Department is responsible for the maintenance of its own RE installations and the total maintenance and repair cost in the past five years is about \$24 million.

Apart from the above, T · PARK is a sludge treatment facility. The project is being implemented under a Design-Build-and-Operate contract arrangement. The maintenance costs, services costs and all other expenses have been included in the operation cost and individual items are not being charged separately.

Note 2: Due to technical, site, resources and other different constraints, the scales of the above RE installations are varied. Some of them are small-scale pilot schemes and others are relatively large projects. The electricity generated from some installations will only be used by the relevant buildings or facilities while some facilities have been connected to the power grid. In general, there may be more room for development of RE for facilities in the New Territories than in the urban area. Provision of RE installations at existing buildings is usually subject to more constraints which will affect electricity output. As for new buildings or facilities, provision of RE power generation installations will be considered holistically at the design stage so as to achieve better results in electricity generation. Besides, the electricity generated by some facilities will only be used by specific parts of the relevant buildings or facilities, and the relevant departments do not have breakdown on the electricity consumption of the specific parts concerned. Therefore, there would be technical difficulty in comparing the proportion of the electricity generated by different RE installations in the total electricity consumption of the relevant facilities, which may also not fully reflect the potential, circumstances and effectiveness of RE adoption in such places.