## CONTROLLING OFFICER'S REPLY

**ENB077** 

## (Question Serial No. 5056)

Head:	(42) Electrical and Mechanical Services Department
Subhead (No. & title):	(-) Not Specified
Programme:	(3) Energy Efficiency and Conservation, and Alternative Energy
Controlling Officer:	Director of Electrical and Mechanical Services (CHAN Fan)
Director of Bureau:	Secretary for the Environment

Question (Member Question No. 111):

With regard to the energy-saving projects for the Government and public bodies under the programme, please advise this Committee of the venue, title and committed expenditure of each of the 55 and 50 projects completed respectively in 2012-13 (please itemise separately).

<u>Asked by</u>: Hon. WU Chi-wai <u>Reply</u>:

Information about the projects completed from 2012 to 2013 is provided in the table below:

Year 2012

Item	Venue	Project Description	Project
			Expenditure (\$)
1	Backup Air Traffic Control	Replacement of existing lighting systems	220,000
	Centre	by more energy efficient ones	
2	Tsing Yi Police Station	Replacement of existing air-cooled chiller	1,200,000
		plant by water-cooled type chiller plant	
		(Phase 1)	
3	Tsing Yi Police Station	Replacement of existing air-cooled chiller	1,200,000
		plant by water-cooled type chiller plant	
		(Phase 2)	1 000 000
4	APB Centre	Replacement of air-conditioning systems	1,800,000
5	Sha Tin Government Offices	Refurbishment of existing T8 fluorescent	1,400,000
		lighting system with more energy-efficient	
		T5 lighting system (Phase 2)	
6	Tsuen Wan Multi-storey	Refurbishment of existing T8 fluorescent	990,000
	Carpark Building	lighting system with more energy-efficient	
		T5 lighting system (Phase 2)	
7	Government quarters, 122	Replacement of existing T8 fluorescent	1,200,000
	Pokfulam Road	lighting system by more energy-efficient T5	
		lighting system - staircases and carpark	
8	Government quarters, 6 Lok	Refurbishment of existing T8 fluorescent	900,000
	Fung Path	lighting system with energy-efficient LED	
		lighting system	
9	Sai Kung Government Offices	Replacement of existing T8 fluorescent	500,000
	(Carpark and 5/F Corridor	lighting system by LED lighting system	
	Areas)	plus photo sensors	

Item	Venue	Project Description	Project Expenditure (\$)
10	King's College (Annex Block)	Replacement of existing T8 fluorescent lighting system by LED light fittings	1,200,000
11	Cheung Sha Wan Government Offices	Replacement of air-cooled chiller no. 9 by water-cooled type	2,000,000
12	Cheung Sha Wan Government Offices	Replacement of air-cooled chiller no. 10 by water-cooled type	2,000,000
13	Chater Hall, Conduit Road	Refurbishment of existing lightings with energy-efficient ones	280,000
14	EPD Office at Island West RefuseTransfer Station	Refurbishment of existing T8 fluorescent lighting system with T5 fluorescent lighting system (Phase 2)	820,000
15	APB Centre	Replacement of air-cooled chiller no. 5 by high efficiency chiller	1,600,000
16	Marine Police Port District Headquarters cum Marine Police South Police Station	Replacement of storage type water heating system by energy-efficient instantaneous water heating system	170,000
17	Caroline Hill Depot, Fan Garden Depot and Tuen Mun Depot	Replacement of existing air compressor systems by energy efficient systems	350,000
18	Air Mail Centre Workshop, Airport Police Station Office Block and Tung Chung Police Station (6/F and 7/F)	Refurbishment of existing T8 fluorescent lighting system with T5 fluorescent lighting system	620,000
19	Sha Tin Government Offices	Refurbishment of existing T8 fluorescent lighting system with more energy-efficient fluorescent lighting system (Phase 3)	1,600,000
20	APB Centre	Replacement of air-cooled chiller no. 6 by high efficiency chiller	1,700,000
21	Siu Ho Wan EMSD Depot	Replacement of existing high bay lighting system by more energy-efficient LED high bay lighting system (Phase 3)	1,600,000
22	Lo Wu and Man Kam To Control Point	Replacement of air-conditioning system	750,000
23	Customs and Excise Department (venues at T1, AAT, DHL, etc.) and GFS Headquarters	<ul> <li>i. Retrofitting of lighting system with T5 fluorescent lighting system</li> <li>ii. Replacement of lighting system by LED lighting system</li> <li>iii. Installation of occupancy sensors</li> </ul>	170,000
24	Yue Kwong Road Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 1)	1,000,000
25	Wong Chuk Hang Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 1)	1,400,000
26	To Kwa Wan Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 1)	1,100,000
27	To Kwa Wan Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 2)	1,000,000
28	Ko Shan Theatre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 1)	1,300,000

Item	Venue	Project Description	Project Expenditure (\$)
29	Ko Shan Theatre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 2)	1,500,000
30	Cheung Chau Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 1)	1,100,000
31	Cheung Chau Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 2)	1,400,000
32	Yue Kwong Road Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 2)	1,000,000
33	Wong Chuk Hang Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 2)	1,400,000
34	Sun Yat Sen Memorial Park Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 1)	1,500,000
35	Sun Yat Sen Memorial Park Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 2)	1,300,000
36	Tsuen Wan Government Offices - Post Office	Replacement of air conditioning system	1,300,000
37	Kowloon Tong Education Services Centre	Replacement of existing lighting system by LED lighting system (East Block)	1,500,000
38	Kowloon Tong Education Services Centre	Replacement of existing lighting system by LED lighting system (West Block)	1,900,000
39	Kowloon Tong Government Primary School	Replacement of existing lighting system by LED lighting system	1,400,000
40	Sai Kung Government Offices	Replacement of existing T8 fluorescent lighting system by LED lighting system (G/F carpark areas)	560,000
41	Western Wholesale Food Market	Replacement of high bay lighting system by LED high bay lighting system (West Block)	790,000
42	Western Wholesale Food Market	Replacement of high bay lighting system by LED high bay lighting system at the egg market	1,100,000
43	Tsuen Wan Multi-storey Carpark Building	Replacement of high bay lighting system by LED high bay lighting system on G/F	1,500,000
44	Ho Man Tin Government Offices	Retrofitting of air-conditioning system	2,400,000
45	Airport Police Station (Office Block)	Retrofitting of lighting system with T5 fluorescent lighting system	570,000
46	C&ED and IMMD offices at Terminal 1 of the Hong Kong International Airport	Retrofitting of lighting system with T5 fluorescent lighting system, plus supply and installation of occupancy sensors	240,000

Item	Venue	Project Description	Project Expenditure (\$)
47	Various municipal venues in NT Region including Tsuen Wan Town Hall, North Kwai Chung Market, Wing Fong Street Market, Tsing Yi Swimming Pool, Kwai Shing Swimming Pool, North Kwai Chung Jockey Club Public Swimming Pool, North District Town Hall and Sheung Shui Swimming Pool	Replacement of existing T8 fluorescent lighting system by T5 fluorescent lighting system	1,300,000
48	Various municipal venues in NT Region including Yeung Uk Road Market, Luen Wo Hui Market, Shek Kip Mei Service Reservoir Playground, Lok Shun Path Barbecue Area, Hang Hong Street Sitting-out Area, To Shek Street Sitting- out Area, Tui Min Hoi Promenade Sitting-out Area, San On Street Sitting-out Area, San On Street Sitting-out Area, Ping Wui Street Rest Garden, Ha Wan Tsuen Garden, Kat Hing Wai Playground, Kadoorie Beach, Wo Liu Hang Playground Local Open Space Site C1 / Hin Tin Street 31C, Tin Sam Garden No.1, A Kung Kok Street Garden, North District Community Centre Amenity Area, North District Sports Ground, Pak Fuk Children's Playground and Butterfly Beach Park	Replacement of existing fluorescent lighting system by T5 fluorescent lighting system and replacement of existing 70W/80W high pressure sodium vapour lamps	1,000,000
49	South Kwai Chung Public Library	Replacement of existing T8 fluorescent lighting system by T5 fluorescent lighting system	150,000
50	Various municipal venues in NT Region including Tsing Yi Market, Kwu Tung Market, Dai Kwai Street Refuse Collection Point, Plover Cove Road Market and Refuse Collection Point, Yan Oi Market, Tai Kiu Market, Tung Yick Market, Yuen Long Vehicle Depot, Luen Wo Hui Municipal Services Building, Tai Tau Leng Playground, Tai Po Depot and Tai Po Sports Ground	Replacement of existing T8 fluorescent lighting system by T5 fluorescent lighting system and replacement of existing high bay lamps by energy-efficient induction lamps	1,400,000
51	Hung Hom Market	Addition of variable speed drive for the escalators	390,000
52	Air Traffic Control Complex	Improvement of lighting for the Hong Kong Observatory Airport Meteorological Office	170,000

Item	Venue	Project Description	Project Expenditure (\$)
53	WSD Kowloon East Regional Building	Replacement of existing fluorescent lighting system by LED high bay lighting system (workshop, pump room and staircases)	1,800,000
54	Kwai Fong Multi-storey Car Park	Replacement of existing fluorescent lighting system by LED high bay lighting system - car park (Phase 1)	1,670,000
55	Kwai Fong Multi-storey Car Park	Replacement of existing fluorescent lighting system by LED high bay lighting system - car park (Phase 2)	1,200,000

## Year 2013

Item	Venue	Project Description	Project Expenditure (\$)
1	Chek Lap Kok Fire Station	Replacement of Air Handling Unit and Primary Air Handling Unit (with variable speed drive)	420,000
2	Sun Tin Wai Community Hall, Sha Tin	Replacement of existing lighting system by energy-efficient lighting system	510,000
3	Chun Shek Community Hall, Sha Tin	Replacement of existing lighting system by energy-efficient lighting system	630,000
4	Tsuen Wan Multi-storey Carpark Building	Replacement of existing lighting system by LED lighting system - carpark (G/F to 4/F)	1,900,000
5	Tsuen Wan Multi-storey Carpark Building	Replacement of existing lighting system by LED lighting system - carpark (5/F to 9/F)	1,800,000
6	Low Block of High Court Building	Replacement of one existing air-cooled chiller by high efficiency chiller	960,000
7	Chek Lap Kok Fire Station	Replacement of chiller water pumps and associated accessories	680,000
8	Chek Lap Kok Fire Station	Replacement of sea water-cooled chillers by high efficiency chiller systems	990,000
9	Various municipal venues including Sai Wan Ho Sports Centre, Harbour Road Sports Centre and Quarry Bay Market	Replacement of existing incandescent / tungsten halogen and T8 luminaries by energy-efficient T5 luminaries, and replacement of existing mercury vapour lamps by energy-efficient halogen lamps	320,000
10	Various municipal venues including Kowloon Park, Hammer Hill Road Swimming Pool and Health Education Exhibition and Resource Centre	Replacement of existing T8 lamps by energy-efficient T5 lamps, and replacement of existing metal halide lamps by energy-efficient induction lamps	510,000

Item	Venue	Project Description	Project Expenditure (\$)
11	Various municipal venues including Lung Sum Avenue Sports Centre, Tuen Mun Riverside Park, Yeung King Playground, San Hui Playground, Tuen Mun Park, San Wo Lane Playground, Tai Mei Tuk Water Sports Centre, Pak Shek Kok Waterfront Promenade, Tai Po Old Market Playground, Lok Ma Chau Lookout Public Toilet, Cafeteria Old Beach, Shek Wu Hui Playground and	Replacement of existing incandescent / tungsten halogen and metal halide luminaries by energy-efficient luminaries	450,000
12	Sheung Shui Garden No.4Cheung Sha WanGovernment Offices	Retrofitting of air-conditioning system	4,600,000
13	Kowloon City Law Courts Building	Retrofitting of air-conditioning system	2,800,000
14	High Block of High Court Building	Replacement of one existing air-cooled chiller by high efficiency chiller	1,900,000
15	Airport Police Station (Barrack Block)	Replacement of two heat pump systems	690,000
16	Government VIP Lounge	Refurbishment of the lighting system with LED lighting system	150,000
17	Hung Hom Police Station	Retrofitting of air-cooled chiller no. 1	1,300,000
18	Hung Hom Police Station	Retrofitting of air-cooled chiller no. 2	1,300,000
19	Kwai Chung Police Station	Retrofitting of air-cooled chiller no. 1	1,300,000
20	Kwai Chung Police Station	Retrofitting of air-cooled chiller no. 2	1,300,000
21	Cheung Sha Wan Police Station	Retrofitting of air-cooled chiller no. 1	1,000,000
22	Cheung Sha Wan Police Station	Retrofitting of air-cooled chiller no. 2	1,000,000
23	Tsuen Wan District Police Headquarters	Retrofitting of air-cooled chiller no. 1	1,200,000
24	Tsuen Wan District Police Headquarters	Retrofitting of air-cooled chiller no. 2	1,200,000
25	Tsuen Wan District Police Headquarters	Retrofitting of air-cooled chiller no. 3	1,200,000
26	Lady Trench Polyclinic	Replacement of existing window type air conditioners by central VRV air- conditioning system	450,000
27	Tai O Jockey Club General Outpatient Clinic	Retrofitting of lighting system	150,000
28	Government Logistic Centre - 4/F, part of 2/F, toilets and lobbies	Replacement of existing lighting system by LED lighting system	1,200,000
29	Government Logistic Centre - 6/F, part of 2/F and disposal stores	Replacement of existing lighting system by LED lighting system	1,200,000
30	60, 61 and 62 Moorsom Road Non-Departmental Quarters - carpark and external concourse areas	Replacement of existing lighting system by LED lighting system	1,000,000

Item	Venue	Project Description	Project Expenditure (\$)
31	Shun Lee Disciplined Services Quarters - staircases of Block 1, 2, 3 and 4	Replacement of existing lighting system by LED lighting system	1,500,000
32	Elizabethan Court - staircases and common area	Replacement of existing lighting system by LED lighting system	500,000
33	Western Wholesale Food Market - external areas, staircase and corridor	Replacement of existing lighting system by LED lighting system	300,000
34	Shun Lee Disciplined Services Quarters - staircases of Block 5, 6, 7 and 8	Replacement of existing lighting system by LED lighting system	1,500,000
35	Cheung Chau Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system	1,900,000
36	Sun Yet Sen Memorial Park Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system	1,700,000
37	Tin Shui Wai Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 1)	1,300,000
38	Tin Shui Wai Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 2)	1,300,000
39	Oi Kwan Court (FEHD offices)	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 1)	1,400,000
40	Oi Kwan Court (FEHD offices)	Replacement of existing air-conditioning system by high efficiency chiller system (Phase 2)	1,400,000
41	Wai Tsuen Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system	3,200,000
42	Cornwall Street Squash and Table Tennis Centre	Replacement of existing air-conditioning system by high efficiency chiller system	3,400,000
43	Shun Lee Tsuen Sports Centre	Replacement of existing air-conditioning system by high efficiency chiller system	4,600,000
44	Mong Kok Government Offices	Installation of electromagnetic induction descaling device for the fresh water-cooled HVAC system	510,000
45	Civil Engineering and Development Department Headquarters Building	Installation of electromagnetic induction descaling device for the fresh water-cooled HVAC system	460,000
46	APB Centre	Installation of electromagnetic induction descaling device for the fresh water-cooled HVAC system	510,000
47	Government quarters, 87-91 Broadcast Drive	Replacement of existing lighting system by LED lighting system	200,000
48	EMSD Headquarters Building	Installation of electromagnetic induction descaling device for the fresh water-cooled HVAC system	340,000
49	Public Works Central Laboratory	Installation of electromagnetic induction descaling device for the fresh water-cooled HVAC system	340,000
50	Public Health Laboratory Centre	Optimization of chiller plant operation	270,000