

Hong Kong Green Building Council Limited 香港綠色建築議會有限公司 1/F Jockey Club Environmental Building 77 Tat Chee Avenue, Kowloon Tong, Hong Kong 香港九龍塘達之路77號賽馬會環保樓一樓 Tel +852 3994 8888 Fax +852 3994 8899 www.hkgbc.org.hk

Annex 3 - Sample of the Reply Slip

1.	Please select the type of your submission and provide the relevant information.			
\boxtimes	It is a new case study for current retrofitting initiatives.			
	Please provide the name of the current retrofitting initiatives, or you can refer to Annex 1 for the relevant numbering, i.e. A1, A2, A3, etc. You can relate your case study with more than one retrofitting initiatives.			
	Name of the current A6, A9, B5, B8, C7, C14 retrofitting initiatives:			
	It is a new retrofitting initiative, and supplements with a relevant case study.			
	Please select ONE relevant chapter for the new retrofitting initiative.			
	□ HVAC – Water-side □ Carpark			
	□ HVAC – Air-side □ Heating			
	□ Electrical System – Lighting □ Building Envelope			
	☐ Electrical System – Electricity ☐ Kitchen Distribution System			
	☐ Electrical System – Lift & Escalator ☐ Architectural			
	☐ Smart Control Systems ☐ Others			
	□ Server Room/ Data Centre			
	Please provide the name, brief description, suggested consideration of the new retrofitting initiatives.			
	Name of the new retrofitting initiatives:			





Brief description	
(around 100 words):	
Suggested	
consideration:	

2. Please provide the details of the case study.

Information of Building		
Building owner:	ABC Limited	
Building name:	ABC Building	
Photo of the building: (At least 300 dpi)	*Please attach the photo as Annex	
Description of the building:	 Grade A Commercial complex with 23 floors of offices, 4 floors shopping centre, 3 floors basement carpark Fully air-conditioned with air-cooled central chilled water system, deferential pressure by-pass, constant speed pumps Fan-coil unit for offices and shopping centre with pre-treated fresh air Generator set lift T-8 light tube 	





Information of Retrofitting Project		
Retrofitted initiative(s):	HVAC Chilled water system: Converted the chilled water system to variable flow system. All pumps fitted with variable speed drives and necessary controls to control the flowrate of the chilled water by differential temperature of chilled water supply and return header and override by pressure differential of the critical circuit point HVAC primary Fresh air system: Converted the primary fresh air system to demand control. Fresh air flow rate on every floor is controlled by resetting the set point of a constant air value flow according to a carbon dioxide sensor. Speed of fresh air fan is controlled by a pressure sensor at the supply air duct Lift: modernise the existing Generator set lift to VVVF lift control Lighting: replace all common area lighting to LED lighting panel	
Schematic diagram/ photo indicating the changes/ implementation (optional): (At least 300 dpi)	* Please attach the diagram/photo as Annex	
Observed benefits other than energy saving:	 Reduced maintenance resources in plant operations and future retro-commissioning and balancing More information for plant monitoring and reporting Smoother operation, shorter waiting time for passengers Resolved the problem of sourcing lift spare parts Better light quality 	
General observations of the retrofitting project:	 HVAC system retro-fit have not affected the tenants Standard retro-fitting initiatives with proven technologies and straight forward Lift retro-fit requires shut down of lift services one by one. Some disturbance to tenants but manageable Lightings for offices are replaced during weekends Lightings for shopping centres are replaced area by area during non-business hours. Slightly affected on aesthetics of the mall during the retro-fit period. Posters advising customers of the enhancing project was posted. No complaints received. 	



Hong Kong Green Building Council Limited 香港綠色建築議會有限公司 1/F Jockey Club Environmental Building 77 Tat Chee Avenue, Kouloon Tong, Hong Kong 香港九龍塘達之路77號賽馬會環保樓一樓 Tel +852 3994 8888 Fax +852 3994 8899 www.hkgbc.org.hk

	 Overall a well justified project with good outcomes with tangible and non-tangible benefits
Name of consultant and contractors (optional):	

Cost		
Total cost (in HKD):	HKD 6.8 million	
Cost breakdown (optional):	Chilled water system HKD 300,000 Primary air system HKD 120,000 Lift modernization HKD 4,000,000 Lighting HKD 800,000	
Saving		
Total savings/year (in HKD):	HKD 580,000	
Savings/year breakdown (optional):	Chilled water system: HKD 60,000 Payback: 5 yr Primary air system: HKD 40,000 Payback: 3 yr Lift modernization: HKD 80,000 Payback: 50 yr Lighting: HKD 400,000 Payback: 2 yr	
Payback:	11.7 yr	
Subsidy/ Funding		
The project is supported by (if any):	Green Building Fund	

Awards	
Award(s) received by the project (if any):	Green Building Award Innovation and Technology Award

3. Please provide the contact information for onward liaison. The contact information will not be disclosed in the guidebook.

Contact person:	
Organisation:	
Position:	
Contact no.:	
Email:	