



Submission Booklet

(Checklist for GBPP submission – NOC BCC – Major Projects)

Prior the Dubai Building Code Implementation

APPLICABILITY

Regulation	: GB-04: Green Building Regulations – New Construction PCFC-TRK-CED-GB-REG-04
Procedure	: Procedure for NOC-BCC Green Building Submission (Major Projects) PCFC-TRK-CED-GB-CP-04(1)
Phase	: NOC-BCC

This booklet comprises the checklists for various elements of the green building regulations and is meant to be used by the stakeholders concerned for providing accurate information on the project. It comprises the following parts

- Part-1** [Project Summary](#)
- Part-2** [Checklist for Green Building submission](#)
- Part-3** [Checklist for Commissioning related tasks](#)
- Part-4** [Energy Statement / Building Simulation](#)

Disclaimer

This checklist has been developed for project teams to use when compiling the submission documentation for Trakhees Review / Assessment

A completed version of this checklist must be included within the Main Submission.

The accuracy and completeness of the submission is entirely the responsibility of the project team. Trakhees will not be held accountable for incorrect or incomplete submissions sent for assessment.



PART-1

PROJECT SUMMARY

Project Name:	GB Consultant:
Plot No:	Commissioning specialist:
Project description:	Engineer of record:
Project Contact Name:	
Contact E-Mail:	

I, the Project Contact, hereby confirm that:

- I have reviewed the submission checklist and the contents therein and ascertained that they align with the main submission package provided to Trakhees
- I understand that Trakhees reserve the right to not assess a submission that is inconsistent with the Regulations, submission procedures and the guidelines
- I take complete responsibility for the accuracy and completeness of the submission.

Name:

Signature:

Date:

PART- 2

CHECKLIST FOR GREEN BUILDING SUBMISSION [NOC-BCC]

Project Name:

S.NO	DOCUMENT DETAILS	ATTACHED (Yes / No)	REMARKS
1	Proof of appointment of Green Building Consultant (For Design and Construction phase)		
2	Proof of appointment of Commissioning Specialist (For Design and Construction phase)		
3	Trakhees' Approval certificate for the Green Building consultant. (Should be valid)		
4	Trakhees' Approval certificate for the Commissioning specialist (Should be valid)		
5	Evidence of Project Registration for Certification (External) where applicable		
6	Evidence of Project Registration - In-House Certification		
7	Proof of Payment of Trakhees' In-House Certification Fee (for projects seeking Trakhees' In-House Certification)		
8	Copy of approved Green Building Project Plan (GBPP) (NOC-BP)		
9	A Comprehensive Green Building Project Report (GBPR) providing details of compliance to the GB Regulations		
10	Details / Justifications for changes to the credit compliance between NOC-BP and NOC-BCC phases		
11	Copies of Minutes of meeting (MOM) with Trakhees if any		



S.NO	DOCUMENT DETAILS	ATTACHED (Yes / No)	REMARKS
12	Photographic Evidence to demonstrate compliance to the attempted credits		
13	As-Built drawings as relevant and applicable for the credits being reported as complied		
14	Test Reports where applicable for the attempted credits		
15	Technical datasheets & Material Approvals for relevant credits		
16	Updated Energy Modelling Report based on the revised / latest inputs		
17	On-Site Renewable Report based on the As- installed systems		
18	Evidence of Measurement & Verification infrastructure for post occupancy sustainable operations (awareness program, commitment)		
19	Commitment and timescale for completing the outstanding works and Green Building Certification		

Notes

- 1) The above check-list should be filled up in a professional manner devoid of inconsistencies
- 2) It should be ensured that ONLY the latest / most recent version of the forms as reflected in the portal are used for the submissions. Forms bearing the earlier revisions or those that have been superseded will not be accepted.



PART- 3

CHECKLIST FOR COMMISSIONING RELATED TASKS [NOC- BCC]

Project Name:

The commissioning specialist should perform the activities as per EA Prerequisite 1 and EA Credit 3 and confirm the following as a minimum

ITEM	DESCRIPTION	Yes	No	COMMENTS
1. General Requirements				
a	Minutes of meeting held to explain the role of CxA in this project?	<input type="checkbox"/>	<input type="checkbox"/>	Please provide narrative below on the outcome of this exercise and list the submittals reviewed.
b	Minutes of meeting held to explain the role of CxA in this project?	<input type="checkbox"/>	<input type="checkbox"/>	Please explain and attach the plan.
c	Commissioning plan with detailed breakdown of the individual equipment / systems is attached?	<input type="checkbox"/>	<input type="checkbox"/>	Please explain and attach the plan.
d	Has the client been briefed about the M & V benefits and requirements?	<input type="checkbox"/>	<input type="checkbox"/>	Please explain and attach details.
2. Review of Contractor's Submittals				
a	Review contractor's technical submittals pertaining to systems being commissioned in terms of meeting OPR, BOD, O&M requirements and facilitating performance testing	<input type="checkbox"/>	<input type="checkbox"/>	Please provide narrative below on the outcome of this exercise and list the submittals reviewed.
3. Verifying the Installation and performance of the systems to be commissioned. (to meet the OPR, BOD and contract documents)				
a	Installation Inspections / checks for each system	<input type="checkbox"/>	<input type="checkbox"/>	Please provide evidence of inspections and the outcome
b	System Performance Testing	<input type="checkbox"/>	<input type="checkbox"/>	Please explain EACH element clearly and attach evidence



ITEM	DESCRIPTION	Yes	No	COMMENTS
c	Evaluation of results compared to OPR/BOD	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please explain EACH element clearly and attach evidence</i>
d	Testing & Balancing (TAB) Checks have witnessed by the Commissioning Authority	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please explain EACH element clearly and attach evidence</i>
4. Developing a Systems Manual for the commissioned systems (to assist O & M staff to understand and optimally operate the systems)				
a	Has the system manual been prepared in addition to the contractor's O & M manual?	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please explain and provide evidence</i>
b	Does the manual focus adequately on operations (rather than maintenance) and interactions between systems?	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please explain and provide evidence</i>
c	Does the Systems Manual include the following? 1. Final Version of BOD 2. Single line diagrams & schematic diagrams 3. Sequence of operations, control drawings and original set points 4. Operating Instructions for Integrated Building systems 5. Maintenance schedules 6. Re commissioning details 7. Schedule of calibration	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please explain and provide evidence</i>
5. On-site Training Requirements				
a	Have the training needs and expectations been documented?	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please explain and provide evidence</i>
b	Is the Training for O&M / FM staff and occupants completed?	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please explain and provide evidence</i>
c	Identify Key areas of energy consumption	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please explain and provide evidence</i>
6. Summary Commissioning Report (Please attach the Summary commissioning report)				
a	Does the above report include the confirmation from CxA that the individual systems meet the OPR/BOD and contract documents?	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please explain and provide evidence</i>
b	Does the report have the following:	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please explain and provide evidence</i>



ITEM	DESCRIPTION	Yes	No	COMMENTS
	1. Executive summary and results of the commissioning program? 2. History of Any system deficiency? 3. System Performance Test Results? 4. Summary - Design Review process*? 5. Summary-Submittal review process*? 6. Summary of O & M documentation and training process?			
7. Post Occupancy Review				
a	Coordination with Facility Management Team	<input type="checkbox"/>	<input type="checkbox"/>	Please provide a narrative here and attach commissioning plan that clearly describes items 'a' to 'd'
b	Document Outstanding deficiencies	<input type="checkbox"/>	<input type="checkbox"/>	
c	Energy Consumption analysis	<input type="checkbox"/>	<input type="checkbox"/>	
d	Prepare Post Occupancy report.	<input type="checkbox"/>	<input type="checkbox"/>	

Notes

- The above check-list should be duly filled by the CxA and submitted by the GB consultant as part of Green Building Project Plan.
- If there are specific comments, they can be addressed under the "Remarks" section.
- It should be ensured that ONLY the latest / most recent version of the forms as reflected in the portal are used for the submissions. Forms bearing the earlier revisions or those that have been superseded will not be accepted



PART- 4

ENERGY STATEMENT / BUILDING SIMULATION [NOC-BCC]

Project Name:

Conditioned area:

Total Built-up area:

Energy Usage Intensity:

ENERGY Base Line Case			ENERGY Optimized Case (As result of implementing Green Building standards)			Estimated Energy Saving (KWhr) (EAc1)	Estimated On-site Renewable (KWhr) (EAc2)	ESTIMATED CO2e Emissions Offset (Annual) Metric Tons
Peak Load (KW)	Average Load (KW)	Energy Consumption (KWhr)	Peak Load (KW)	Average Load (KW)	Energy Consumption (KWhr)			

Water Consumption			Materials
Baseline Case (K Gal.)	Optimized Case (K Gal.)	Water Savings (K Gal.)	Materials diverted from landfill (Metric Tons)

Notes

- 1) This sheet shall be filled out by the Green building consultant based on the actual project installation / standing. It is imperative that the changes that had taken place in the course of the construction are duly incorporated in the energy modelling.
- 2) This form shall be filled out by consultant based on the actual construction works and as reflected in the updated Building Energy Simulation / Energy Modelling.
- 3) The values indicated for Energy optimization should be as reflected in the Energy Modelling report for the base case and the proposed case scenarios taking into any revision to the inputs encountered during the project. It includes all of but not limited to the following
 - a. Latest Indoor conditions
 - b. Latest Occupancy
 - c. Finalized Operations schedule
 - d. Zoning as per as built layout
 - e. Latest equipment schedule
 - f. As built EER / COP of the Ac equipment
 - g. As built Envelope / glazing/ fenestration Thermal properties
 - h. As built light power densities (LPD)
- 4) It should be ensured that ONLY the latest / most recent version of the forms as reflected in the portal are used for the submissions. Forms bearing the earlier revisions or those that have been superseded will not be accepted