

Template for Evidence(s)

UI GreenMetric Questionnaire

University : King Mongkut's Institute of Technology Ladkrabang

Country : Thailand

Web Address : <http://www.sustainable.kmitl.ac.th/>

2. Energy and Climate Change (EC)

2.3. Smart building implementation (EC.2)

Smart building

	
HM Building	Medicine faculty building
	
Chao Phya Surawongwaiwat (Worn Bunnag) Convention Hall	Central Library
	
Faculty of education and technology building	Faculty of Information Technology building

List of Smart Building ☆ ☆ ☆																								
F171K171																								
No. BID Building Name Area sq.m. Automation Safety Energy Water Indoor environment Lighting																								
589,878.00																								
Field Requirement Description																								
B Automation B1 BMS Presence of Building Management System (BMS)/Building Information Modelling (BIM)/Building Automation System (BAS)/Facility Management System (FMS)																								
(recommended requirement)																								
B2 APP Interactive support for users via APP or online service																								
S Safety S1 Intruder Alarm System Intruder alarm system (recommended: interfaced with BMS)																								
S2 Fire-fighting Fire-fighting system (recommended: interfaced with BMS)																								
S3 Video surveillance Video surveillance system (recommended: interfaced with BMS)																								
S4 Anti-flooding Anti-flooding system (recommended: interfaced with BMS)																								
E Energy E1 Monitoring Automatic acquisition and logging system of energy consumption (recommended: interfaced with BMS)																								
E2 Management Automatic management system for energy supplies and production (recommended: interfaced with BMS)																								
A Water A1 Monitoring Automatic acquisition and logging system of water consumption (recommended: interfaced with BMS)																								
A2 Recovery Rainwater recovery system for covering the flushing and irrigation																								
I Indoor environment I1 Thermal comfort Monitoring (recommended: interfaced with BMS) of environmental parameters related to thermo-hygrometric comfort (i.e. air temperature, relative humidity, air velocity, etc.)																								
I2 Air quality Monitoring (recommended: interfaced with BMS) of pollutants (i.e. VOC, PM, CO ₂ , ...)																								
I3 Real-time Programming and management in real time according to the occupancy profile of the premises (recommended: interfaced with BMS)																								
I4 Passive system Passive cooling and/or exploitation/limitation systems for free supplies																								
L Lighting L1 LEDs High efficiency luminaires (LEDs)																								
L2 Sensors Automatic lighting control (recommended: presence/illumination sensors interfaced with BMS)																								
L3 Shielding Shielding adjustment and solar control																								
Natural light Passive systems for natural light exploitation																								

Smart building implementation

$$(589,878/783,039)*100= 75.33\%$$

Additional evidence link:

<https://sunun.top/s/r.php?c=bylnmq> List of Smart Building