

## Template for Evidence(s) UI GreenMetric Questionnaire

University : Universitas Sebelas Maret  
 Country : Indonesia  
 Web Address : <https://uns.ac.id/> web greencampus UNS <http://greencampus.uns.ac.id/>

### [2] Energy and Climate Change (EC)

#### [2.3] Smart Building Implementation

**\*Min. at least five requirements for each building**

No.	Name	Place	automation		safety				energy		water		Indoor environment				lighting				Building Area (m <sup>2</sup> )
			B1	B2	S1	S2	S3	S4	E1	E2	A1	A2	I1	I2	I3	I4	L1	L2	L3	L4	
1	Universitas Sebelas Maret; Building of Library	Surakarta, Indonesia	x			x	x	x		x		x					x	x	x		7,457.55 m <sup>2</sup>
2	Universitas Sebelas Maret; Building of Educational Hospital	Surakarta, Indonesia	x			x	x			x		x					x	x		x	3,0285 m <sup>2</sup>
3	Universitas Sebelas Maret; Building of Medical Faculty	Surakarta, Indonesia	x			x	x			x		x					x	x			2,3026 m <sup>2</sup>
4	Universitas Sebelas Maret; Building of FP	Surakarta, Indonesia	x			x				x		x								x	5,893 m <sup>2</sup>
5	Universitas Sebelas Maret; Building of Pasca	Surakarta, Indonesia	x			x				x		x								x	7,370 m <sup>2</sup>
6	Universitas Sebelas Maret; Building of UNS Inn	Surakarta, Indonesia	x			x				x		x								x	12,922 m <sup>2</sup>
<b>Total</b>																					<b>86.953,55 m<sup>2</sup></b>

————— Please compile one row for each building (or homogeneous part of it) by ticking with a "X" for each requirement —————

#### Smart building implementation

$$\frac{\text{total smart building area}}{\text{total building area}} \times 100\%$$

#### Example:

\*Total Building Area: 332,332 m<sup>2</sup> = 86954: 367918= 23.63 %



Figure 1. Smart Building implementation in the Library Building, Universitas Sebelas Maret



Figure 2. Smart Building implementation in the UNS University Hospital



Figure 3. Smart Building implementation in the Medical Faculty Building UNS



Figure 4. Smart Building implementation in the Building E, Faculty of Agriculture UNS



Figure 5. Smart Building implementation in the Post Graduate Building UNS



Figure 5. Smart Building implementation in the UNS Inn

		
<p>Automatic Door Sensor System applicated in the UNS University Hospital</p>	<p>Automatic Fire Alarm Sensor System applicated in in the UNS Inn</p>	<p>CCTV as a security system in UNS</p>
		
<p>Smart building impementation by using <i>Fire detector</i>, <i>sprinkler</i>, dan <i>fire alarm</i> in all over the floor areas in the Library Building UNS .</p>	<p>The use of Vertical Sirculation to the 8 th floor of the Library Building is provided by lift for diffabel</p>	<p>The Security system of Museum Building has been provided by Fire protection System: <i>sprinkler</i>, <i>fire alarm</i>, and <i>exhaust fan</i>.</p>

**Description:**

The Smart building System has been implemented in the Several buildings in UNS by utilized the smart building componets, as follows: automatic fire alarm sensor system, automatic water tab and elevator for vertical sirculation in the building. Several building, which have been applied smaftrt building cpmponents are : the Medical Faculty Building, the Faculty of Agriculture Building; The Post Graduate Building; the Library Building; UNS Inn, the UNS University Hospital.