



## [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.	MNS-University of Agriculture; Block A (Academic Block)	Multan, Pakistan	X	X	x	X	x	x	x	X	x	x	x	x	x	x	x			x	5017
2.	MNS-University of Agriculture; Block A (Girls Hostel)	Multan, Pakistan	X	X	x	X	x	x	x	X	x	x	x	x	x	x	x			X	5825
3.	MNS-University of Agriculture; Block A (VC House and Faculty Residences)	Multan, Pakistan	X	X	x	x	x	x	x	X	x	x	x		x	x	x			x	2323
4.	MNS-University of Agriculture; Block B (Academic Block)	Multan, Pakistan	X	X	x	X	x	x	x	X	x	x	x	x	x	x	x			x	18335
5.	MNS-University of Agriculture; Block B (Administration Block)	Multan, Pakistan	X	X	x	X	x	x	x	X	x	x	x	x	x	x	x			x	3749
6.	MNS-University of Agriculture; Block B (Boys Hostel)	Multan, Pakistan	X	X	x	X	x	x	x	X	x	x	x	x	x	x	x			x	5825
7.	MNS-University of Agriculture; Block B (Guest House)	Multan, Pakistan	X	X	x	x	x	x	x	X	x	x	x	x	x	x	x			x	611
8.	MNS-University of Agriculture; Block B (Central Library)	Multan, Pakistan	X	X	x	x	x	x	x		x	x	x	x	x	X				X	4081
Total			8	8	8	8	8	8	8	7	8	8	8	7	8	8	7			8	45,766

#### Smart building implementation

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



Example:


\*Total Building Area: 150,000 m<sup>2</sup>

$$\frac{41,500 \text{ m}^2}{45,766 \text{ m}^2} \times 100\% = 90.67\%$$

<p align="center"><b>Building in Block A (Academic Block)</b></p>	<p align="center"><b>Building in Block A (Girls Hostel)</b></p>
<p align="center">Area 5017 m<sup>2</sup></p>	<p align="center">Area 5825 m<sup>2</sup></p>
<p align="center"><b>Building in Block A (Vice Chancellor Residence)</b></p>	<p align="center"><b>Building in Block A (Faculty Residence)</b></p>
<p align="center">Area 395 m<sup>2</sup></p>	<p align="center">Area 1928 m<sup>2</sup></p>
<p align="center"><b>Building in Block B (Academic Block)</b></p>	<p align="center"><b>Building in Block B (Administration Block)</b></p>
<p align="center">Area 18335 m<sup>2</sup></p>	<p align="center">Area 3749 m<sup>2</sup></p>



Building in Block B (Boys Hostel)	Building in Block B (Guest House)
	
Area 5825 m2	Area 611 m2

Building in Block B Central Library

Area 4081 m2