		Parameters				
A.	**HVAC**	**Real time**		**Design**		
1	DEVIATION FROM THE SET POINT (ONE SET POINT)	T_{actual}		T_{sp}		
2	DEVIATION FROM THE SET POINT (MULTIPLE SETPOINTS)	T_{actual}	Presence	$T_{sp-\ normal}$	$T_{sp-\ absence}$	$T_{sp-\ economy}$
3a	OPERATION DURING NON WORK HOURS	T_{actual} rises (winter) / drops (summer)		Work hours		
3b	TEMPERATURE REACHES SP EARLY	Time offset T_{actual} reaches set-point earlier		Start up time		
3c	TEMPERATURE LEAVES SP LATE	Time delay T_{actual} remains at set point		Stop down time		
4	OPEN WINDOW EFFECT	T_{actual}		Effect calibration		
5	LOW OCCUPANCY EFFECT	HVAC Energy	Occupancy	High / low thresholds		
6	UNTAPPED NOCTURNAL VENTILATION/ COOLING	T_{actual}		Effect calibration		
7	HIGH SOLAR GAIN	surface temperature				
B.	**LIGHTING**					
1	LIGHTING ON DURING NO PRESENCE	Lux [in]	Presence			
2	LIGHTING ON DURING DAYLIGHT	Lux [in]	Lux [out]			
3	OPERATION DURING NON WORK HOURS			Work hours		
4	LOW OCCUPANCY EFFECT	Lighting Energy	Occupancy	High / low thresholds		
C.	**ELECTRIC DEVICES**					
1	OPERATION DURING NON WORK HOURS	Device consumption		Work hours		
2	LOW OCCUPANCY EFFECT	Lighting Energy	Occupancy	High / low thresholds		

D.	DHW				
1	SOLAR HEAT HEAT LOSSES DUE TO NON OPTIMAL USE	T_{water}	Flow	Solar irradiance	Boiler loss curve

Operating hours 09.00- 17.00

when temperature starts rising/ dropping ==> HVAC ON

if temperature reaches set point at starting hour + DELAY >> quality issue (DELAY) >> EM EVENT when DELAY > TIME[1]

if temperature reaches set point at starting hour - OFFSET >> waste issue (OFFSET) >> EM EVENT when OFFSET > TIME[2]