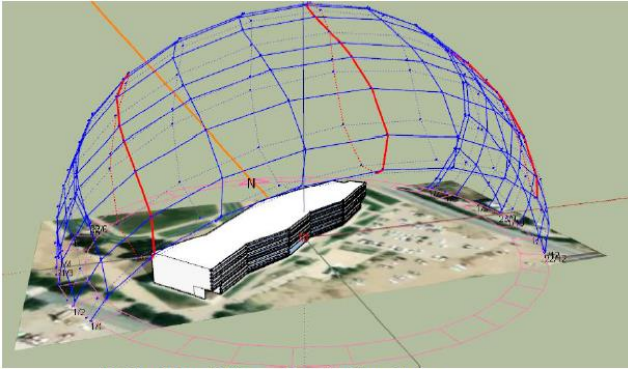
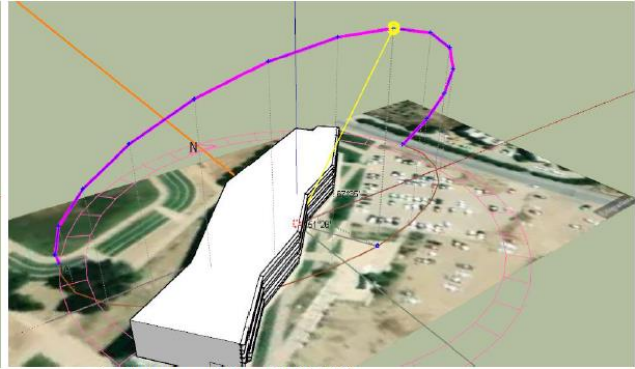




**Energy Audits:** Annually, we conduct an audit of one of the university’s buildings. For instance, these audits have been realized for EH Building and Soli Building. See the information below for more details.



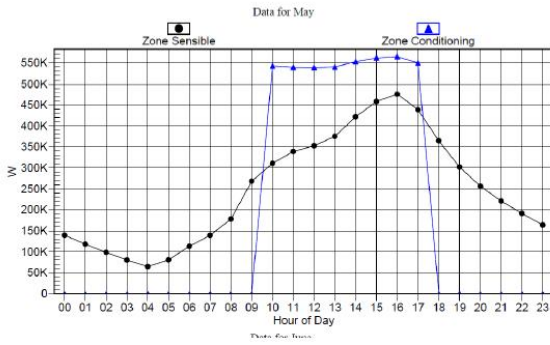
12-Month Sun Pathways Over the Case Study



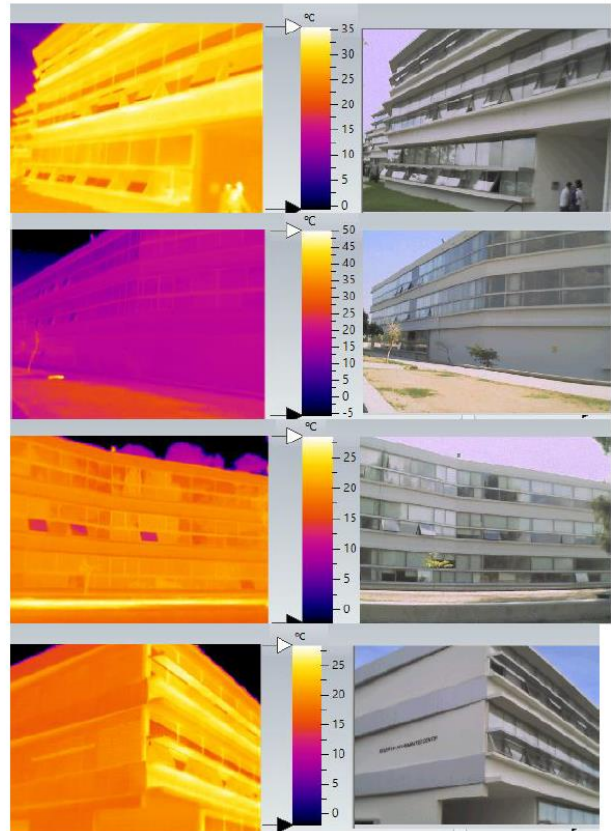
Sun Pathway on May at 11:00 AM

Measure	Annual Net Saving		Installation Cost (\$)	NPV (\$)	PP (year)
	Energy (kWh)	Money (\$)			
Roof Insulation	167,760	18516	33144	82581	1.52
Pipe Insulation	5,054	812	1950	2110	2.4
LED Replacement	11,625	2548	8155	4159	3.2
PV Installation	480,000	76800	300000	176160	3.9
Windows Replacement	52,344	5536	120000	-86935	22.4

Economic Analysis



**ENERGY EFFICIENCY IN EDUCATIONAL BUILDINGS**

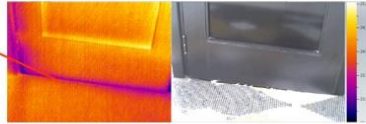




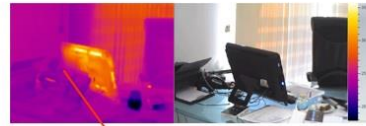
05  
Equipment Profile



Energy Lost From the Door Frames



Air Conditioning Piping under the Ceiling



Sleep mode devices

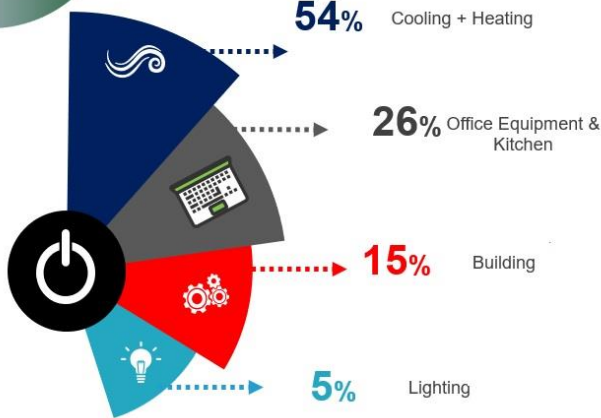


Usage	Devices/Appliances	Number	Watt Consumption	* Hour in Day	Day in Year
Air - Conditioning	Mitsubishi 12000 BTU	2	800	8	250
	LG ARUM 100 LTE 5	2	11,428	5	100
	LG ARUM 120 LTE 5	2	11,599	5	100
Office Work	LG Indoor Unite	21	40	4	100
	Aquarium	1	20	24	365
	PC	11	300	6	250
	Laptop	4	80	8	250
	Printers & Fax	4	500	0.5	250
Kitchen	TV	2	80	1	250
	Refrigerator	2	500	4	250
	Dish Washer	1	2,000	1	250
	Washing Machine	1	2,000	1	250
	Coffee Maker	3	1,200	2	250
	Water Dispenser	1	500	12	250
	Microovavs	1	1,200	1	250
Building	Oven	1	1,500	1	250
	Toaste Maker	1	1,500	1	250
	Hood	1	700	1	250
	Kettle	1	1,200	1	250
	Security Camera	1	160	24	365
	UPS 10 kW	1	200	24	365
Lighting	Water Pump	1	1,100	4	250
	Elevator	1	4,400	3	250
	Ground Floor	40	18	3	250
	First Floor	16	10	3	250
	Second Floor	52	18	3	250
	Third Floor	26	18	3	250
	Total Consumption			47,593 kWh in Year	

06  
End Use Consumption Profile



Energy Audit in Commercial Buildings



07  
Standard Differences

\* EU Average Commercial Building energy Consumption

