



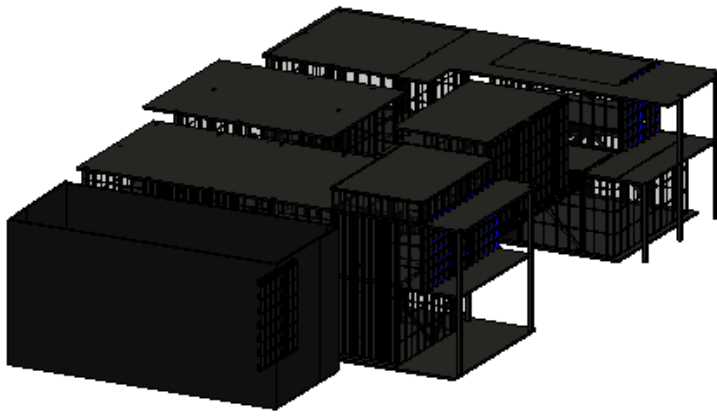
## Yarışma Proje Analiz

## Yarışma Proje Analiz Analysis

Analyzed at 12/26/2015 2:39:39 PM

## Energy Analysis Result

991468



## Building Performance Factors

Location:	Ankara, Turkey
Weather Station:	188208
Outdoor Temperature:	Max: 36°C/Min: -9°C
Floor Area:	1,501 m <sup>2</sup>
Exterior Wall Area:	142 m <sup>2</sup>
Average Lighting Power:	12.92 W / m <sup>2</sup>
People:	54 people
Exterior Window Ratio:	22.49
Electrical Cost:	\$0.14 / kWh
Fuel Cost:	\$1.44 / Therm

## Energy Use Intensity

Electricity EUI:	231 kWh / sm / yr
Fuel EUI:	2,171 MJ / sm / yr
Total EUI:	3,004 MJ / sm / yr

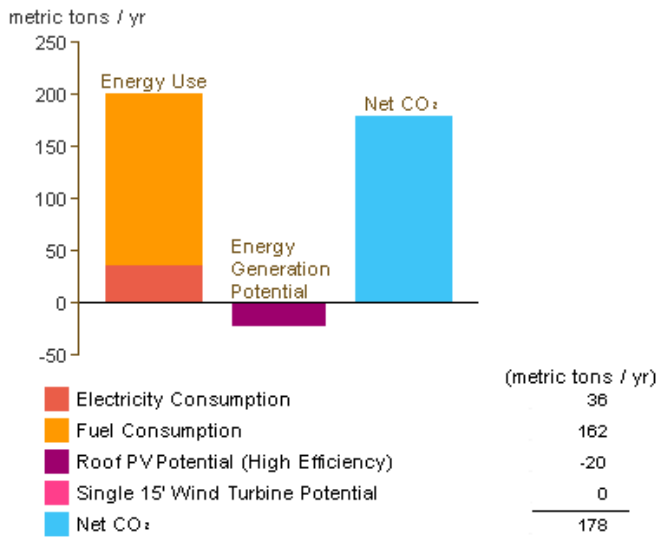
### Life Cycle Energy Use/Cost

Life Cycle Electricity Use:	10,412,946 kWh
Life Cycle Fuel Use:	97,766,494 MJ
Life Cycle Energy Cost:	\$1,264,477
*30-year life and 6.1% discount rate for costs	

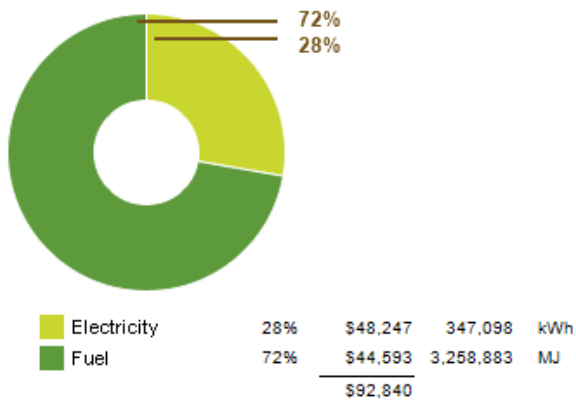
### Renewable Energy Potential

Roof Mounted PV System (Low efficiency):	65,340 kWh / yr
Roof Mounted PV System (Medium efficiency):	130,679 kWh / yr
Roof Mounted PV System (High efficiency):	196,019 kWh / yr
Single 15' Wind Turbine Potential:	943 kWh / yr
*PV efficiencies are assumed to be 5%, 10% and 15% for low, medium and high efficiency systems	

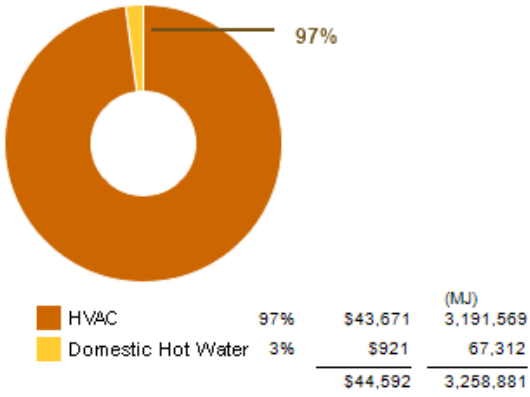
### Annual Carbon Emissions



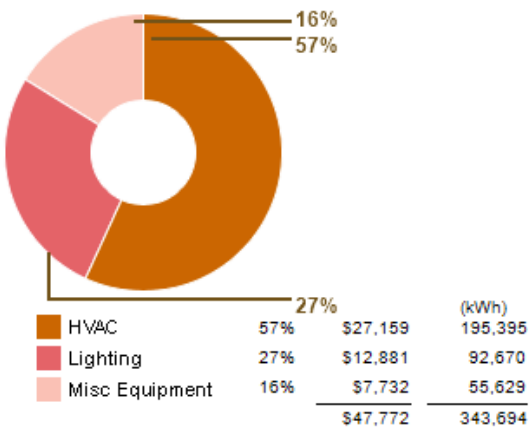
### Annual Energy Use/Cost



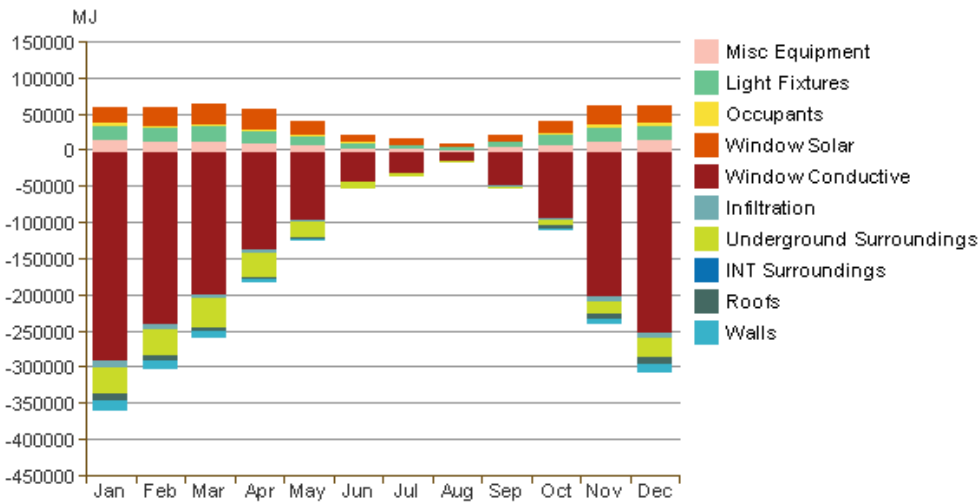
### Energy Use: Fuel



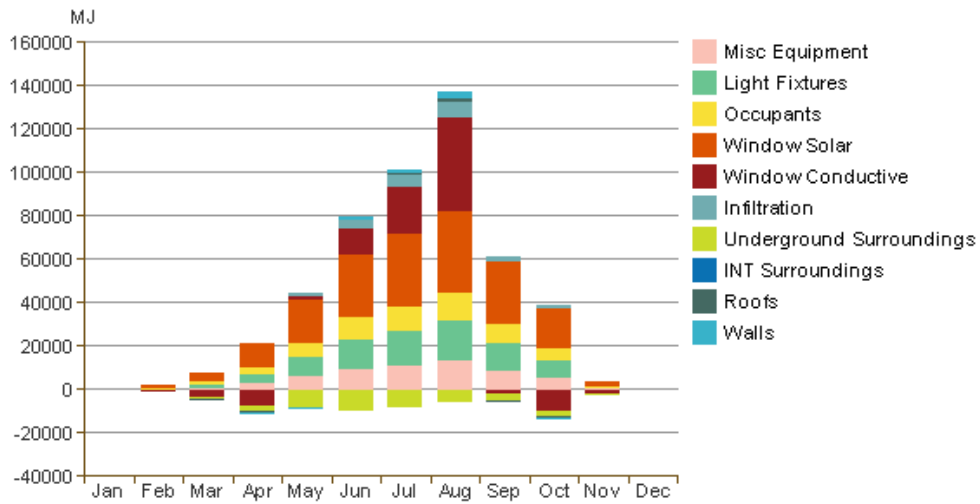
Energy Use: Electricity



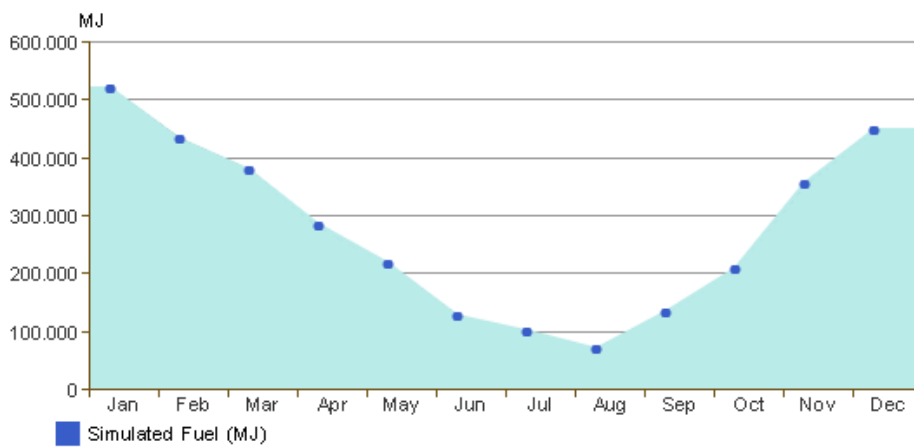
Monthly Heating Load



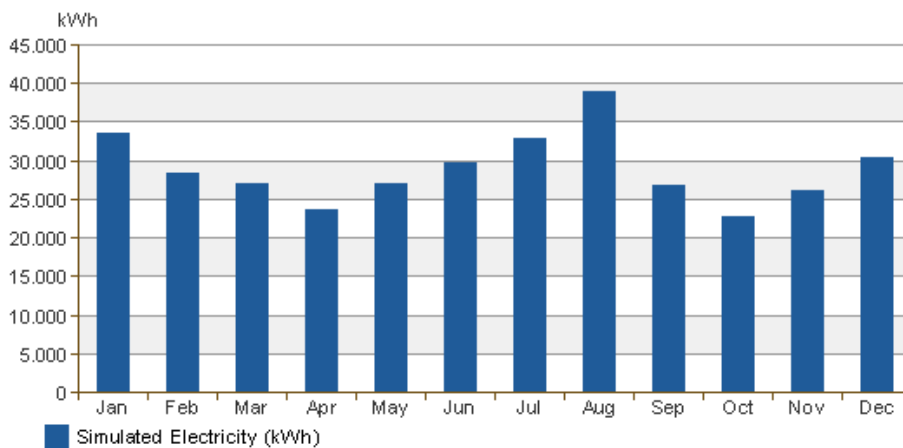
Monthly Cooling Load



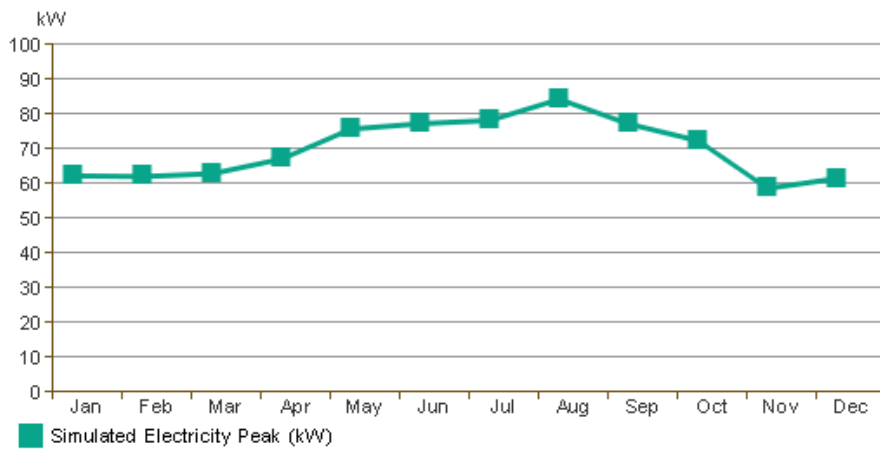
### Monthly Fuel Consumption



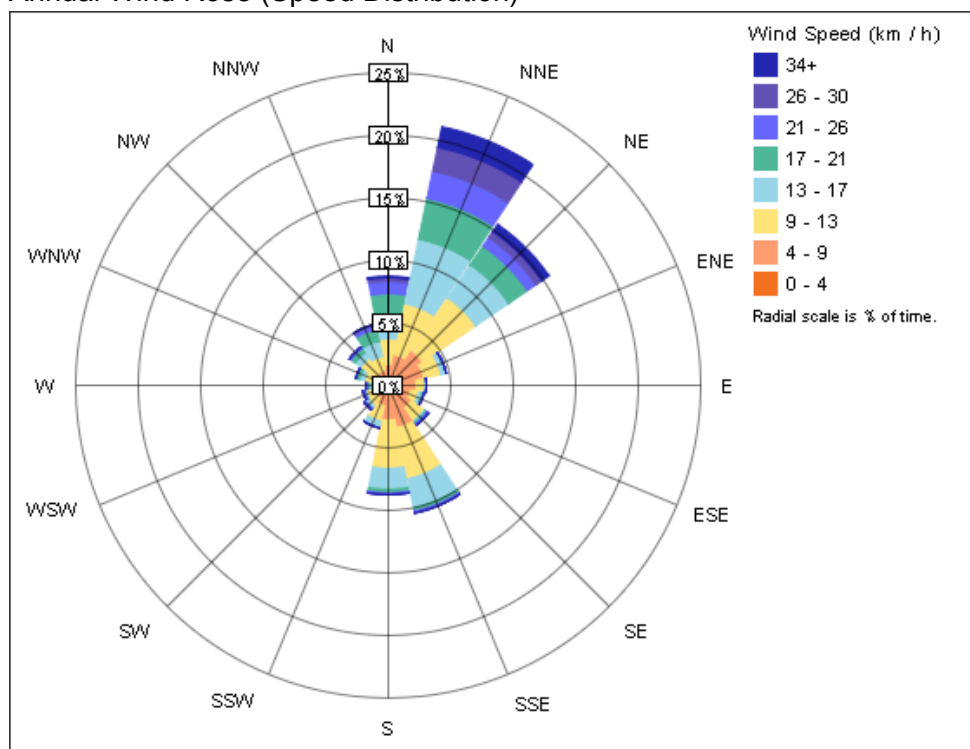
### Monthly Electricity Consumption



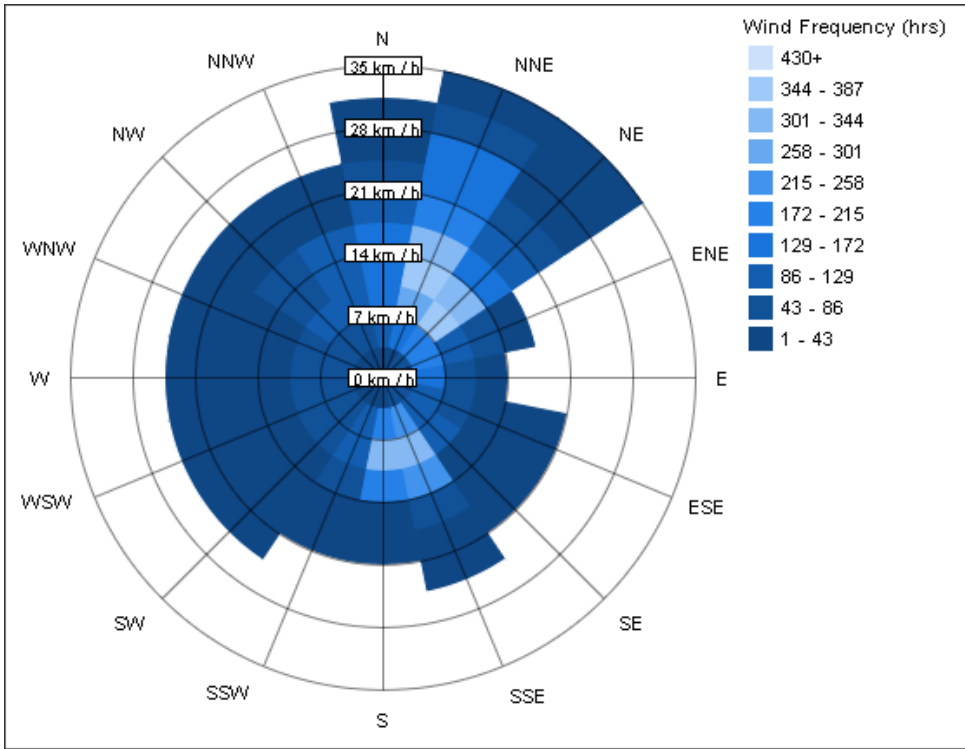
### Monthly Peak Demand



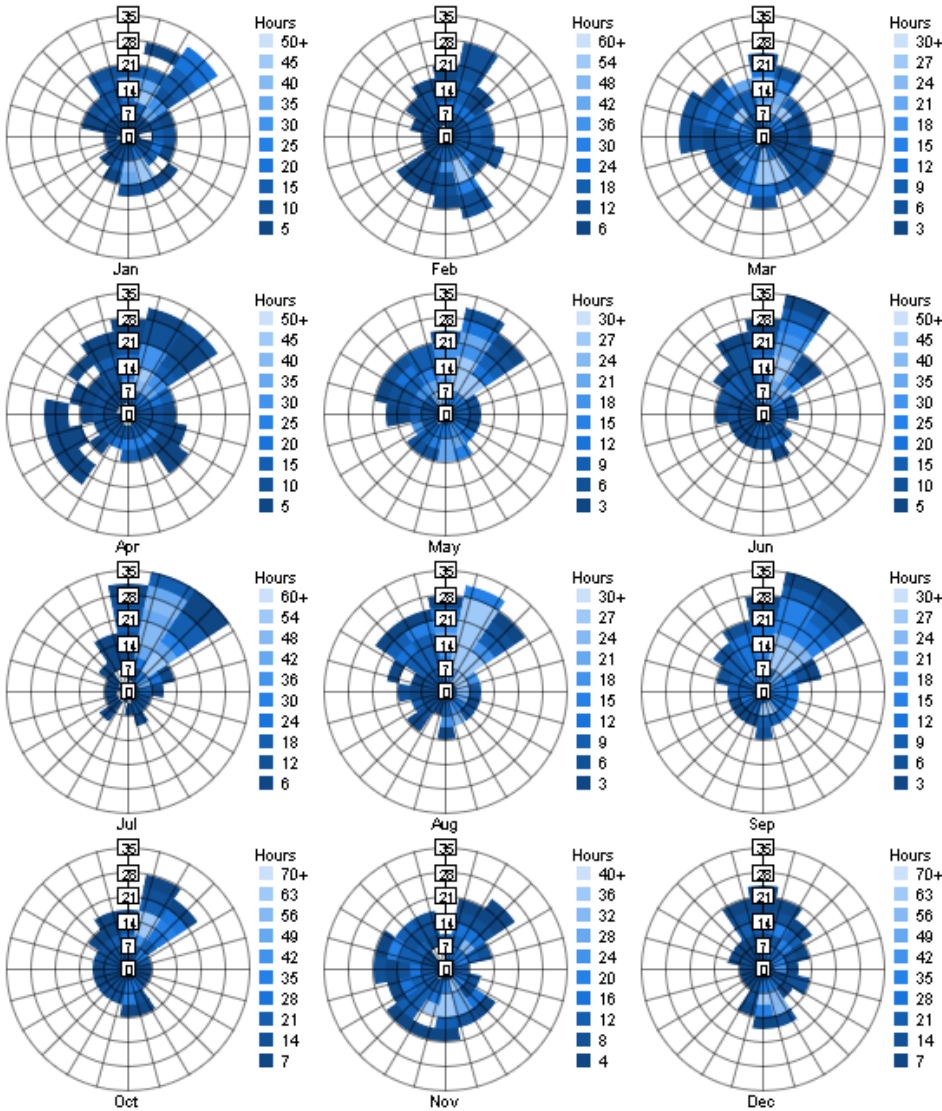
Annual Wind Rose (Speed Distribution)



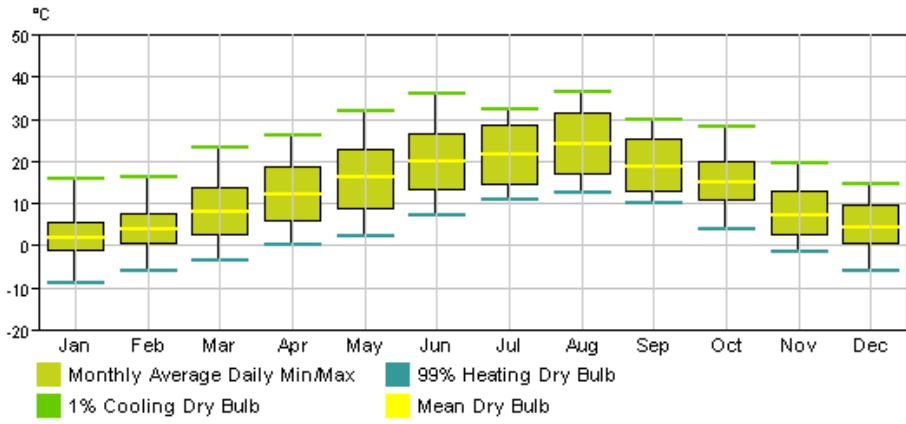
Annual Wind Rose (Frequency Distribution)



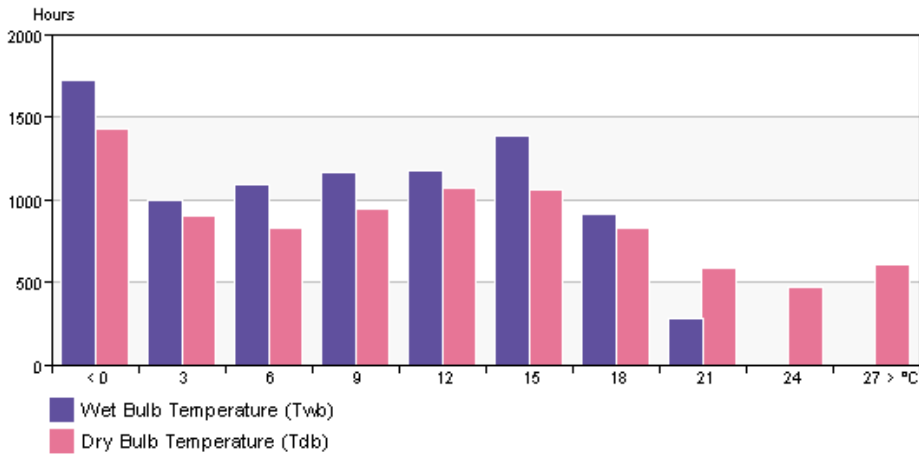
Monthly Wind Roses



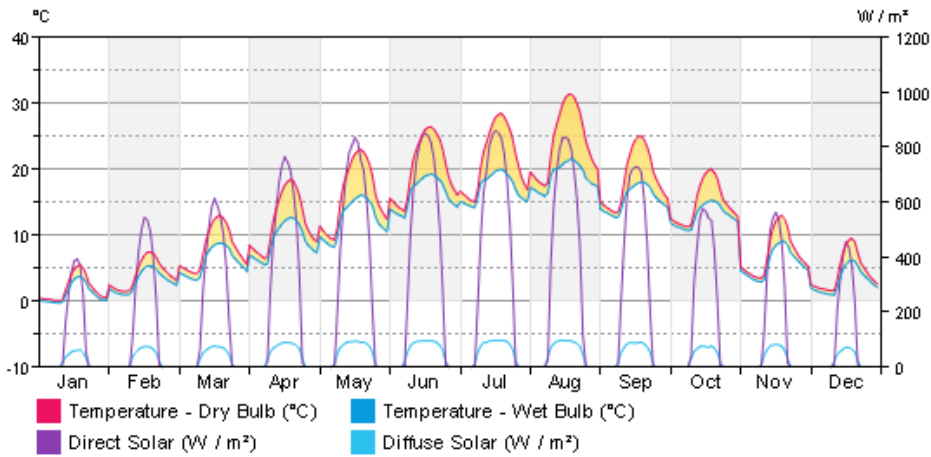
### Monthly Design Data



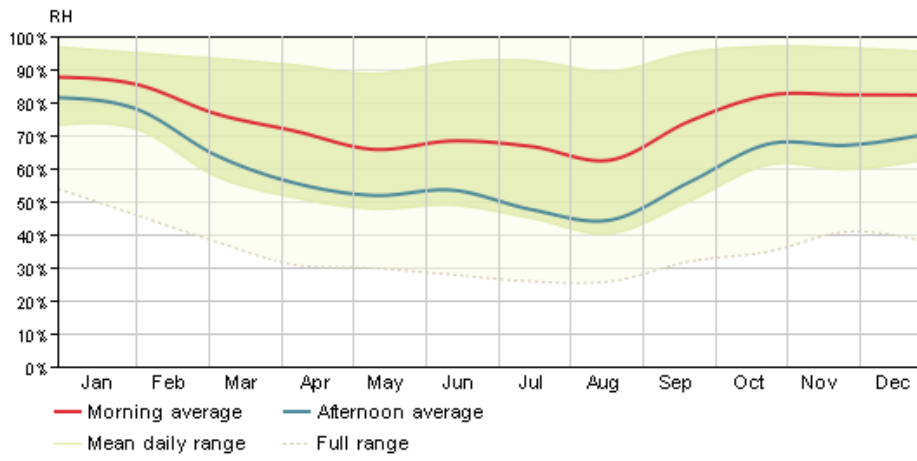
### Annual Temperature Bins



### Diurnal Weather Averages



### Humidity



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## Energy Analysis Data