

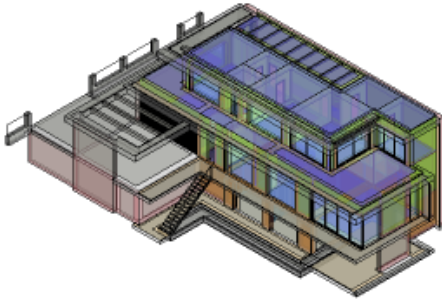


BPA - Revit 2016 analytical model (3)

BPA - Revit 2016 analytical model.0009 Analysis

Analyzed at 1/6/2019 12:19:40 AM

## Energy Analysis Result



### Building Performance Factors

Location:	Prague, Prague
Weather Station:	162226
Outdoor Temperature:	Max: 34°C/Min: -16°C
Floor Area:	378 m <sup>2</sup>
Exterior Wall Area:	276 m <sup>2</sup>
Average Lighting Power:	4.84 W / m <sup>2</sup>
People:	3 people
Exterior Window Ratio:	0.37
Electrical Cost:	\$0.19 / kWh
Fuel Cost:	\$3.16 / Therm

### Energy Use Intensity

Electricity EUI:	208 kWh / sm / yr
Fuel EUI:	37 MJ / sm / yr
Total EUI:	787 MJ / sm / yr

### Life Cycle Energy Use/Cost

Life Cycle Electricity Use:	2,236,357 kWh
Life Cycle Fuel Use:	402,299 MJ
Life Cycle Energy Cost:	\$200,505

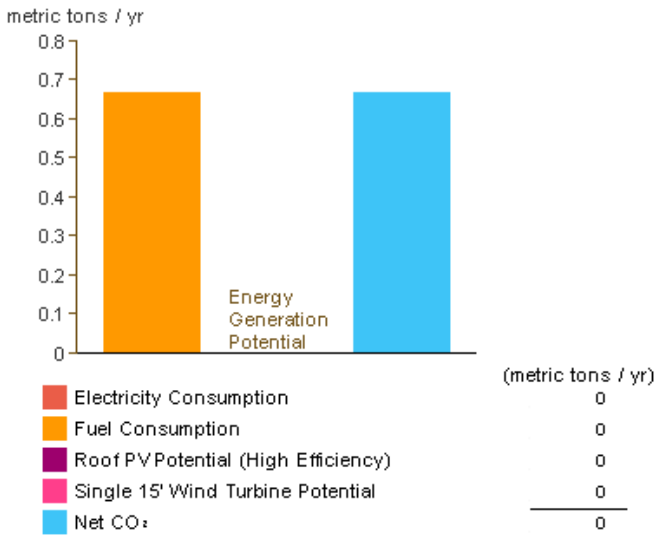
\*30-year life and 6.1% discount rate for costs

### Renewable Energy Potential

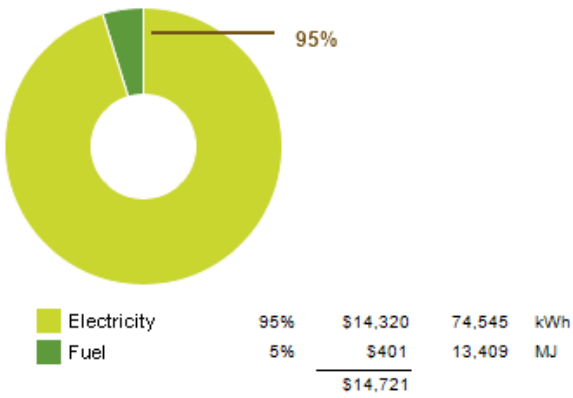
Roof Mounted PV System (Low efficiency):	8,147 kWh / yr
Roof Mounted PV System (Medium efficiency):	16,294 kWh / yr
Roof Mounted PV System (High efficiency):	24,442 kWh / yr
Single 15' Wind Turbine Potential:	967 kWh / yr

\*PV efficiencies are assumed to be 5%, 10% and 15% for low, medium and high efficiency systems

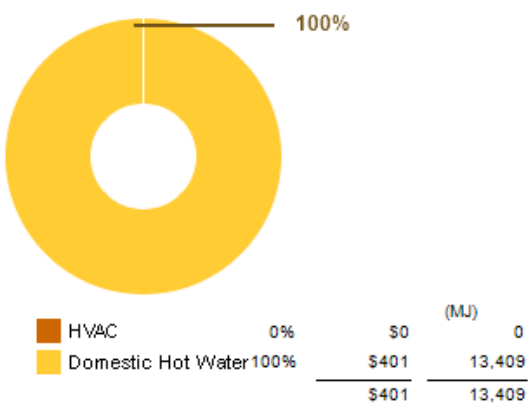
### Annual Carbon Emissions



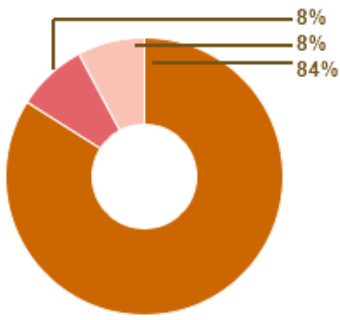
### Annual Energy Use/Cost



### Energy Use: Fuel

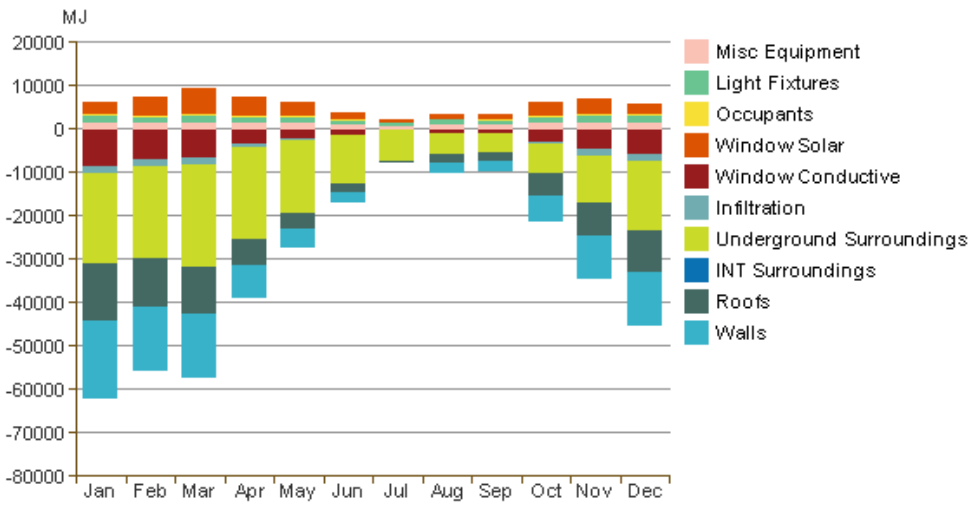


### Energy Use: Electricity

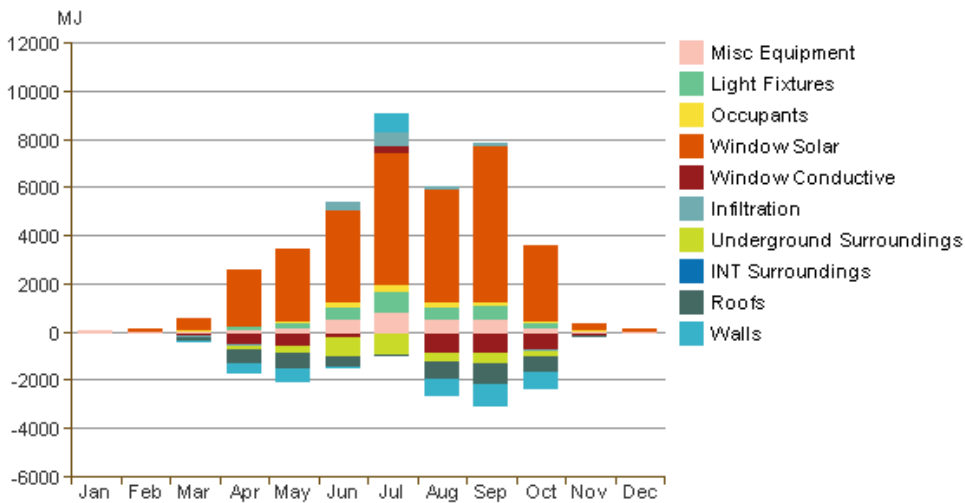


			(kWh)
HVAC	84%	\$12,023	62,587
Lighting	8%	\$1,174	6,112
Misc Equipment	8%	\$1,122	5,844
		\$14,319	74,543

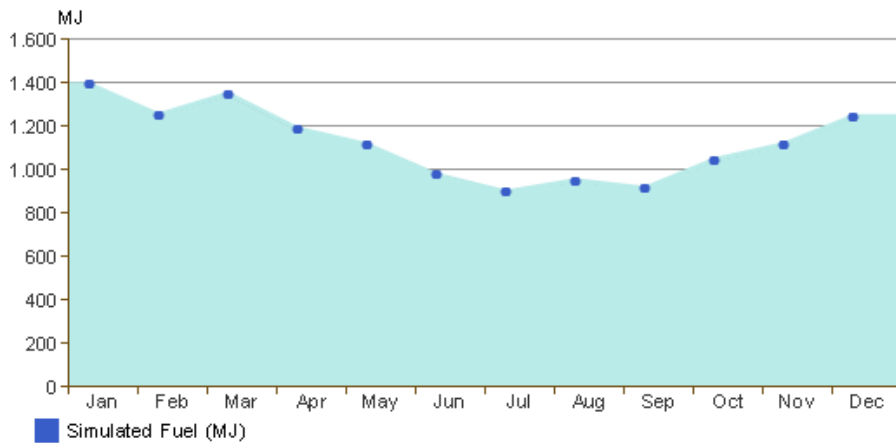
### Monthly Heating Load



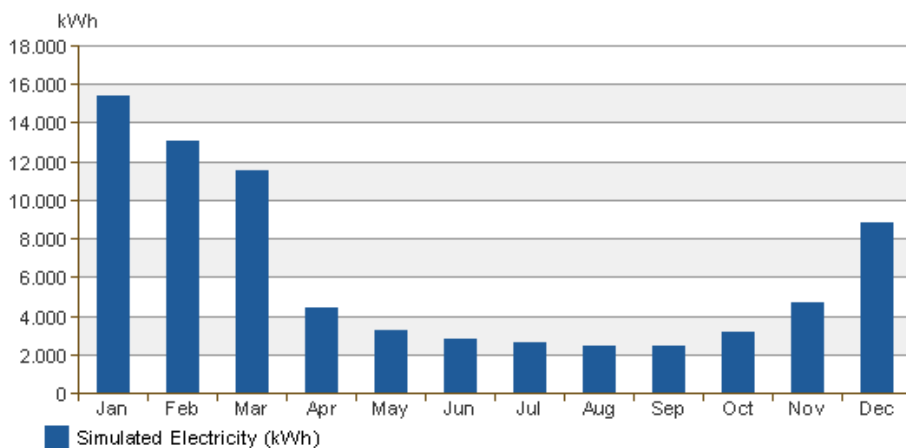
### Monthly Cooling Load



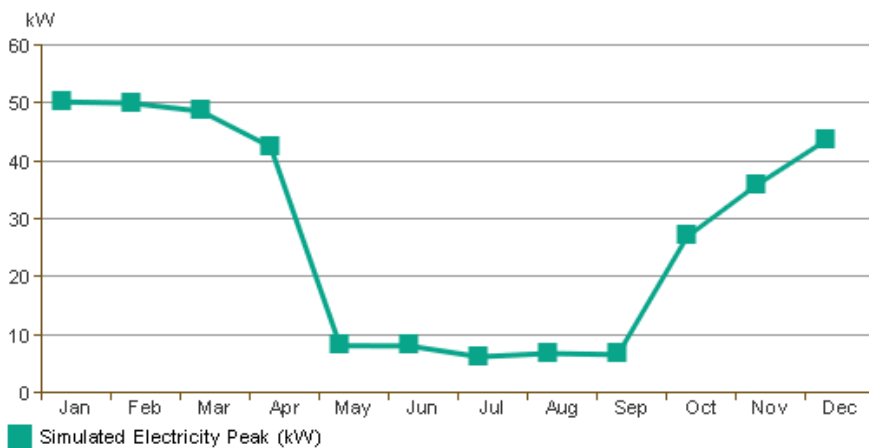
### Monthly Fuel Consumption



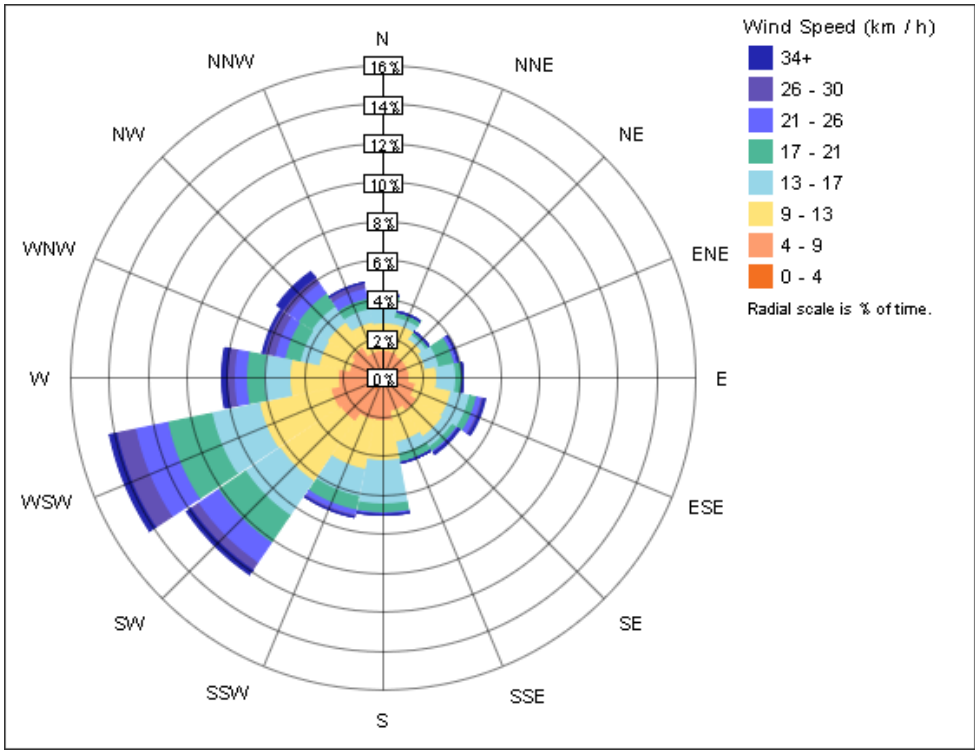
### Monthly Electricity Consumption



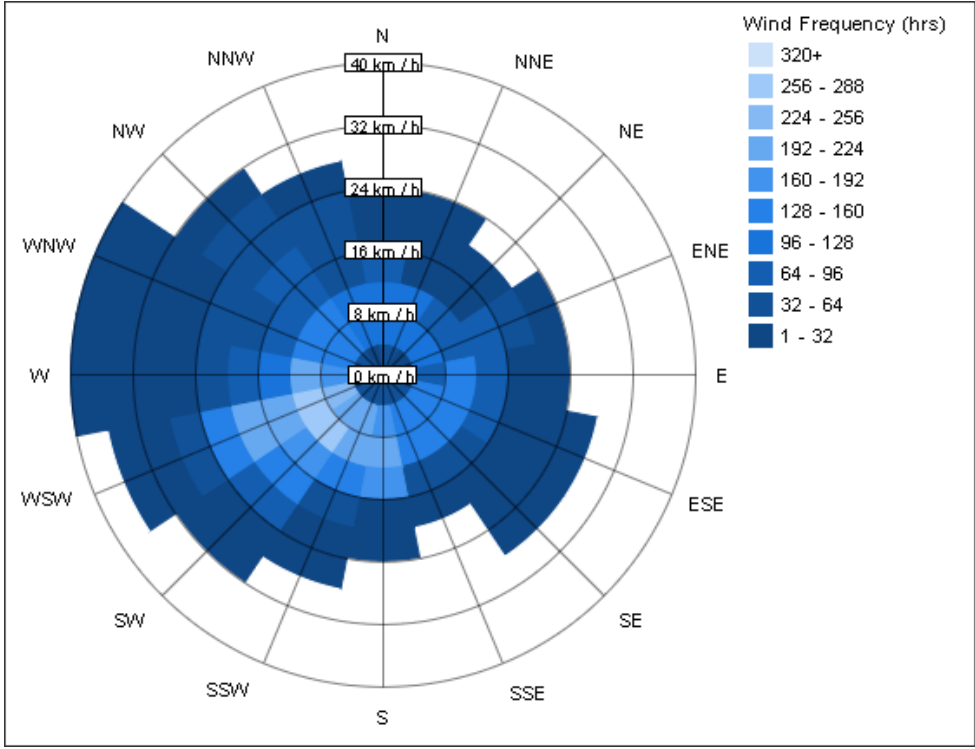
### Monthly Peak Demand



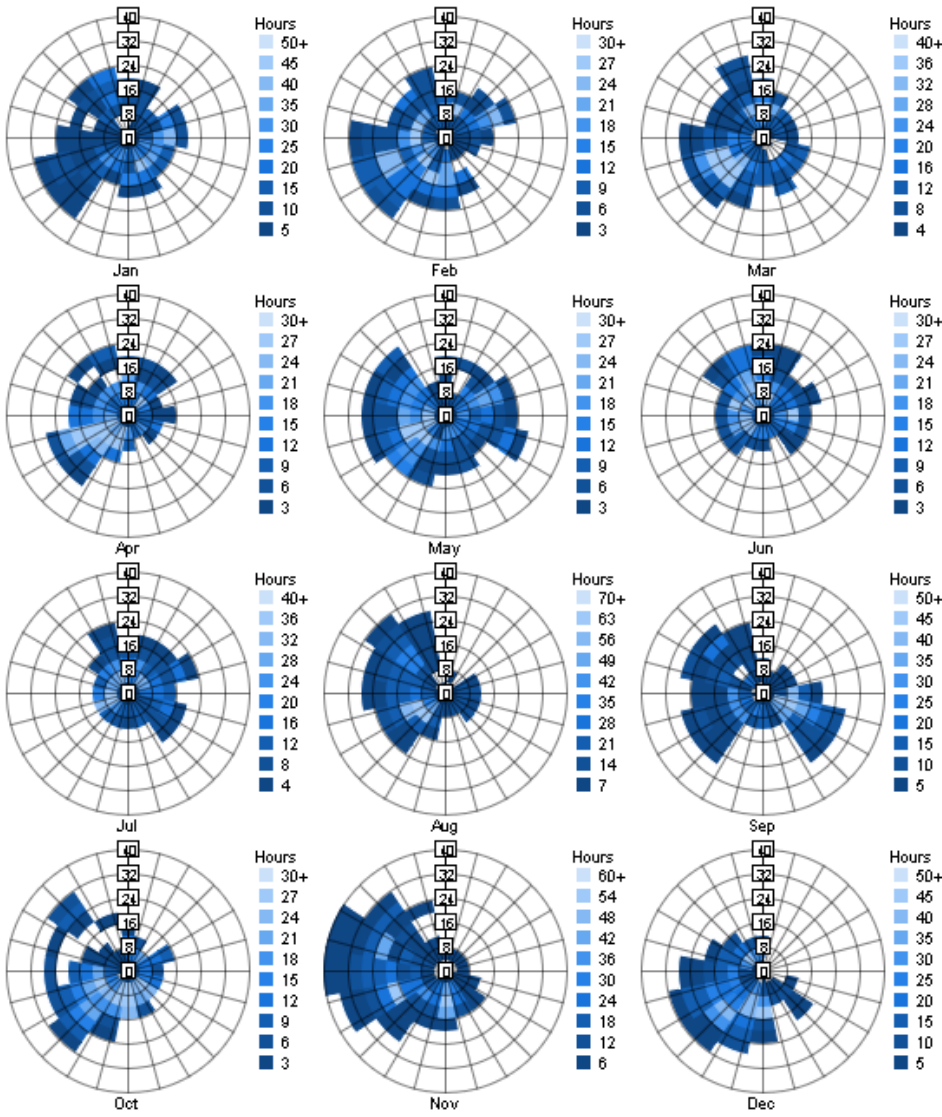
### Annual Wind Rose (Speed Distribution)



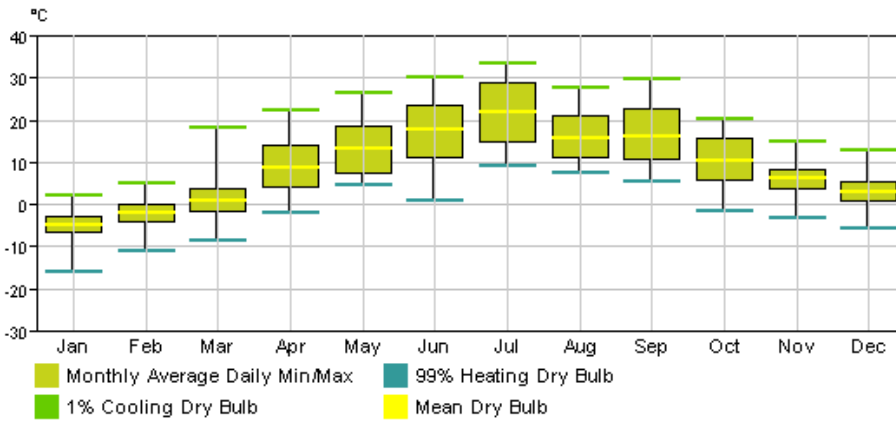
Annual Wind Rose (Frequency Distribution)



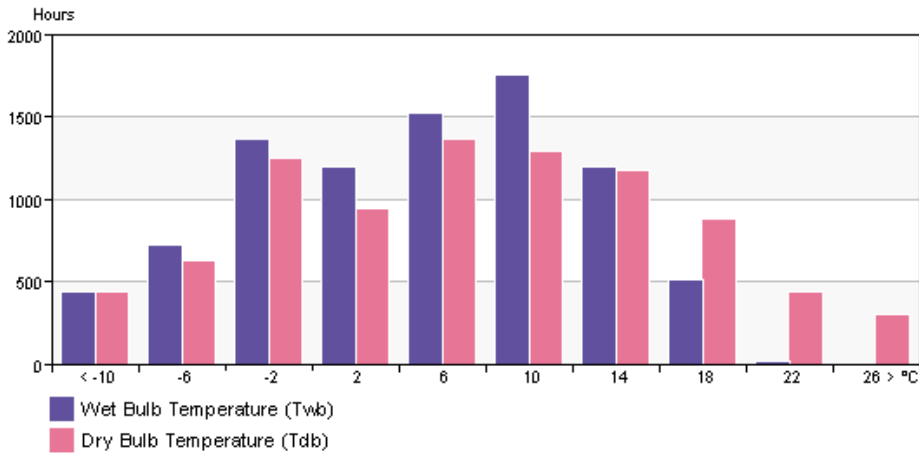
Monthly Wind Roses



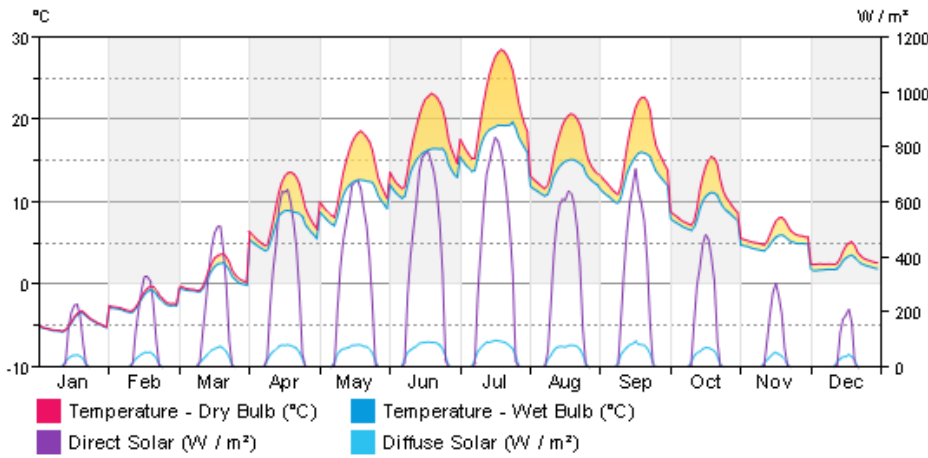
Monthly Design Data



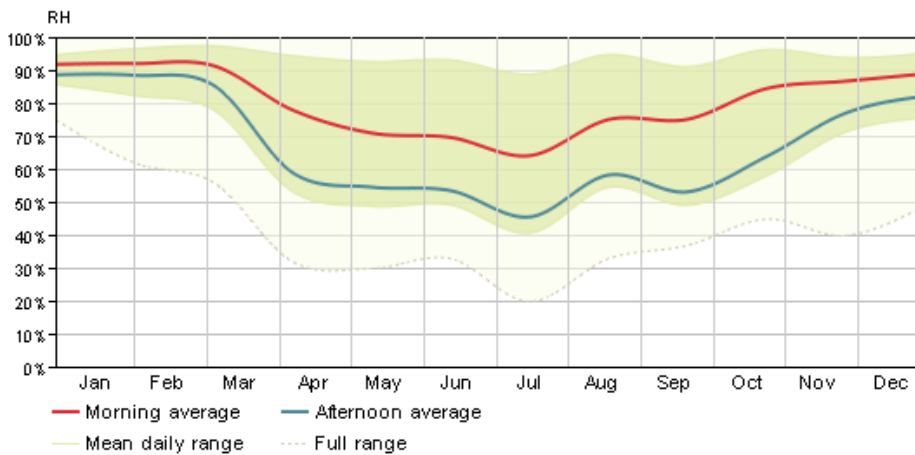
Annual Temperature Bins



Diurnal Weather Averages



Humidity



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Energy Analysis Data