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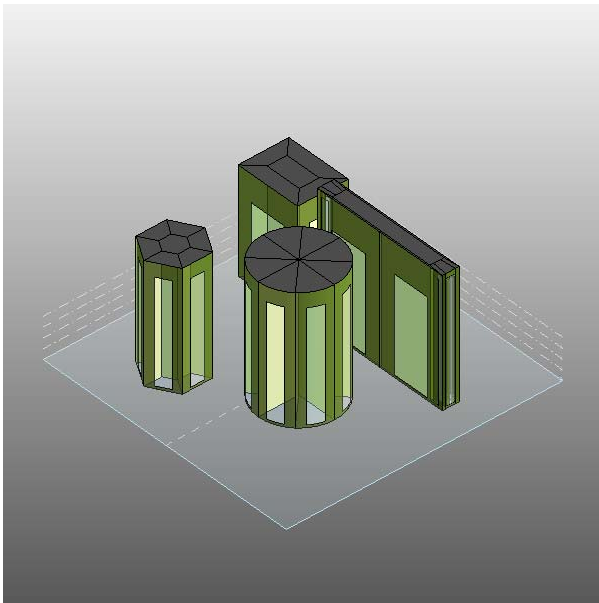
Project11

Project1 Analysis (1)

Analyzed at 11/29/2011 11:30:44 AM

Version 2012.2.21.3448(DOE-2.2-44e4)

Mass



Building Performance Factors

Location:	44.8052253723145,20.4661560058594
Weather Station:	171981
Outdoor Temperature:	Max: 35°C/Min: -15°C
Floor Area:	1,237 m ²
Exterior Wall Area:	13,155 m ²
Average Lighting Power:	10.87 W / m ²
People:	43 people
Exterior Window Ratio:	0.40
Electrical Cost:	\$0.09 / kWh
Fuel Cost:	\$0.78 / Therm

Energy Use Intensity

Electricity EUI:	780 kWh / sm / yr
Fuel EUI:	5,804 MJ / sm / yr
Total EUI:	8,611 MJ / sm / yr

Life Cycle Energy Use/Cost

Life Cycle Electricity Use:	28,929,204 kWh
Life Cycle Fuel Use:	215,360,820 MJ
Life Cycle Energy Cost:	\$1,959,537

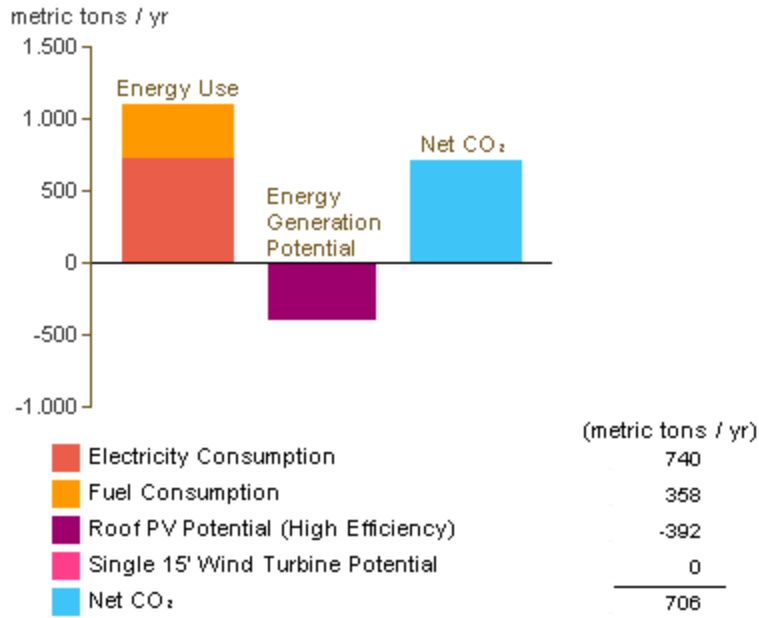
*30-year life and 6.1% discount rate for costs

Renewable Energy Potential

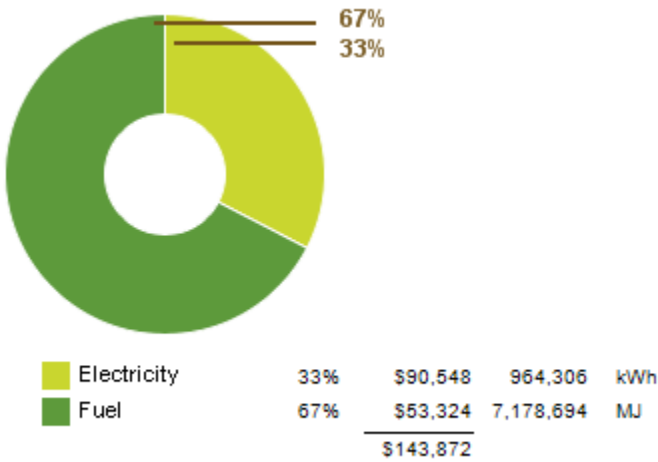
Roof Mounted PV System (Low efficiency):	170,398 kWh / yr
Roof Mounted PV System (Medium efficiency):	340,795 kWh / yr
Roof Mounted PV System (High efficiency):	511,193 kWh / yr
Single 15' Wind Turbine Potential:	670 kWh / yr

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

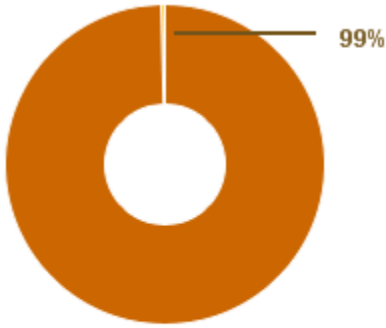
Annual Carbon Emissions



Annual Energy Use/Cost

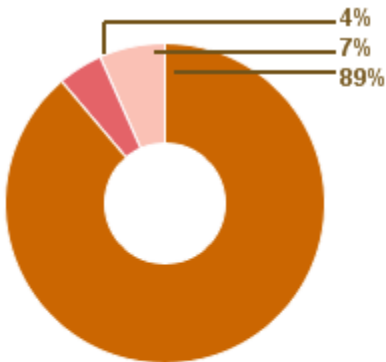


Energy Use: Fuel



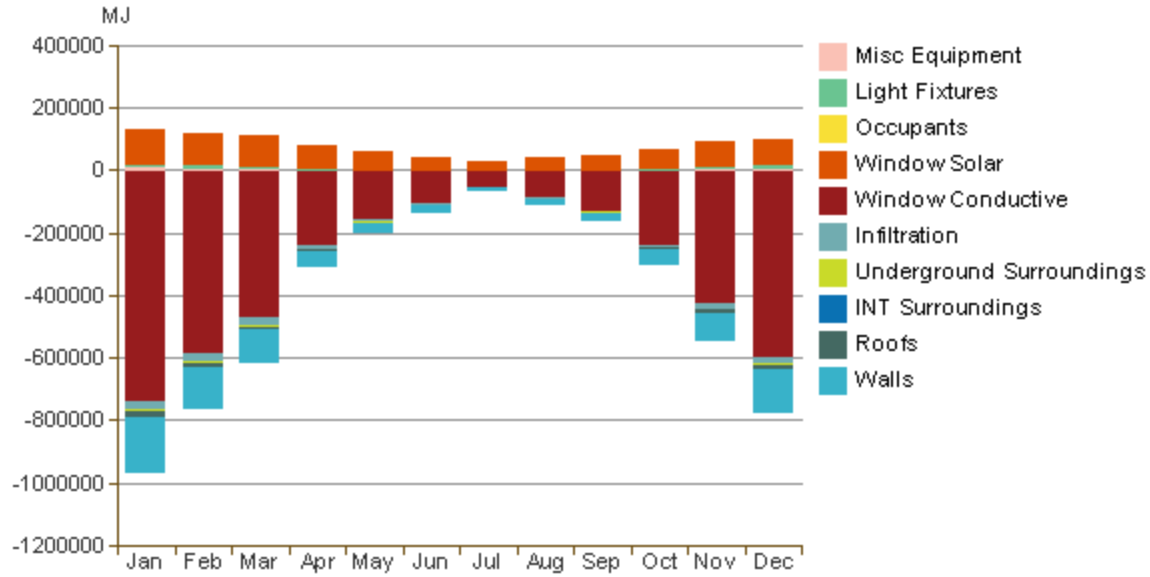
			(MJ)
HVAC	99%	\$53,113	7,150,402
Domestic Hot Water	1%	\$210	28,293
		<u>\$53,323</u>	<u>7,178,695</u>

Energy Use: Electricity

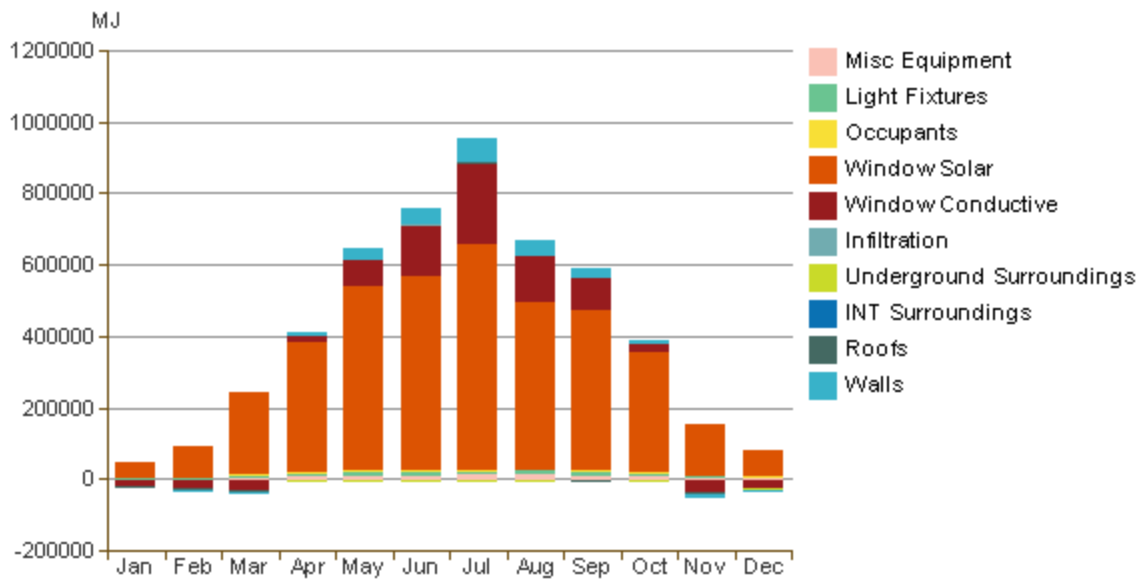


			(kWh)
HVAC	89%	\$80,403	856,262
Lighting	4%	\$4,123	43,914
Misc Equipment	7%	\$6,021	64,130
		<u>\$90,547</u>	<u>964,306</u>

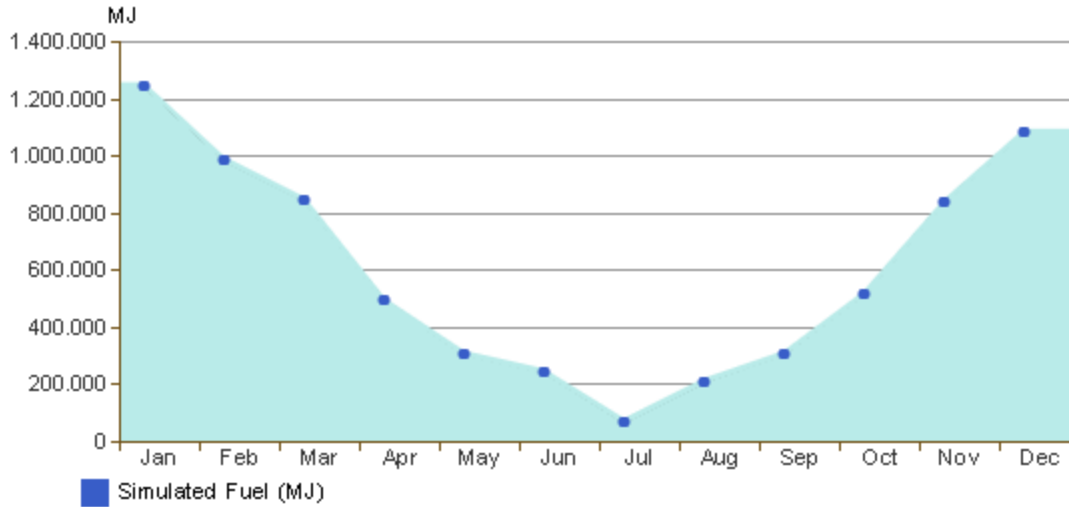
Monthly Heating Load



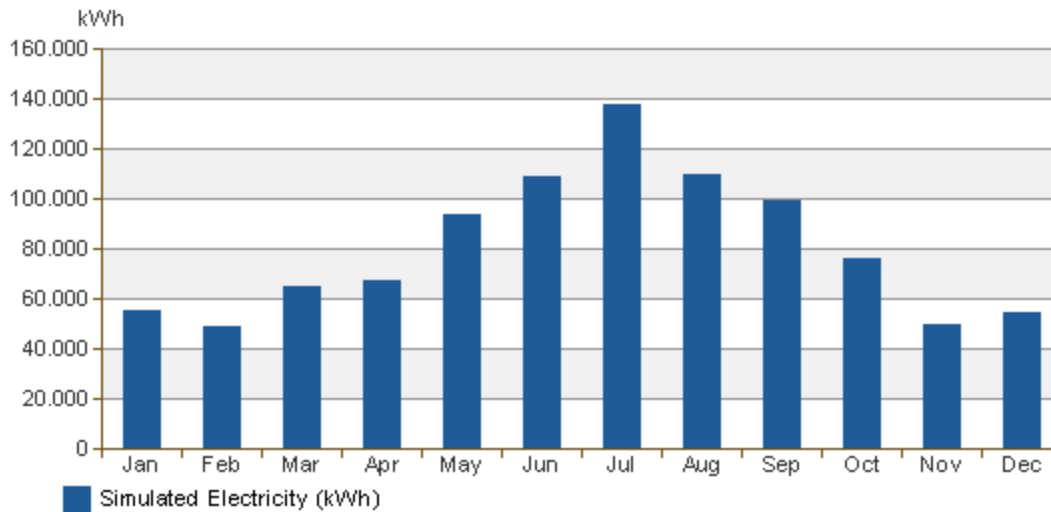
Monthly Cooling Load



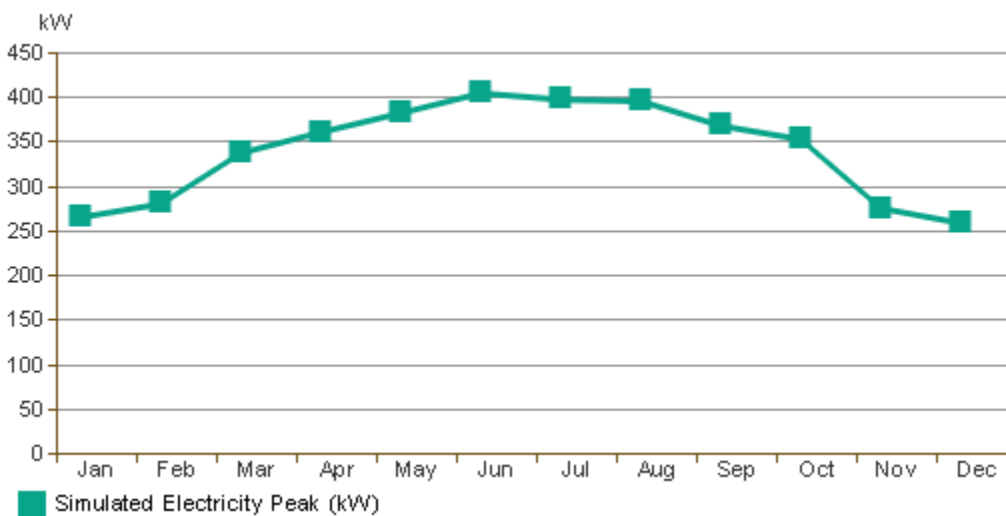
Monthly Fuel Consumption



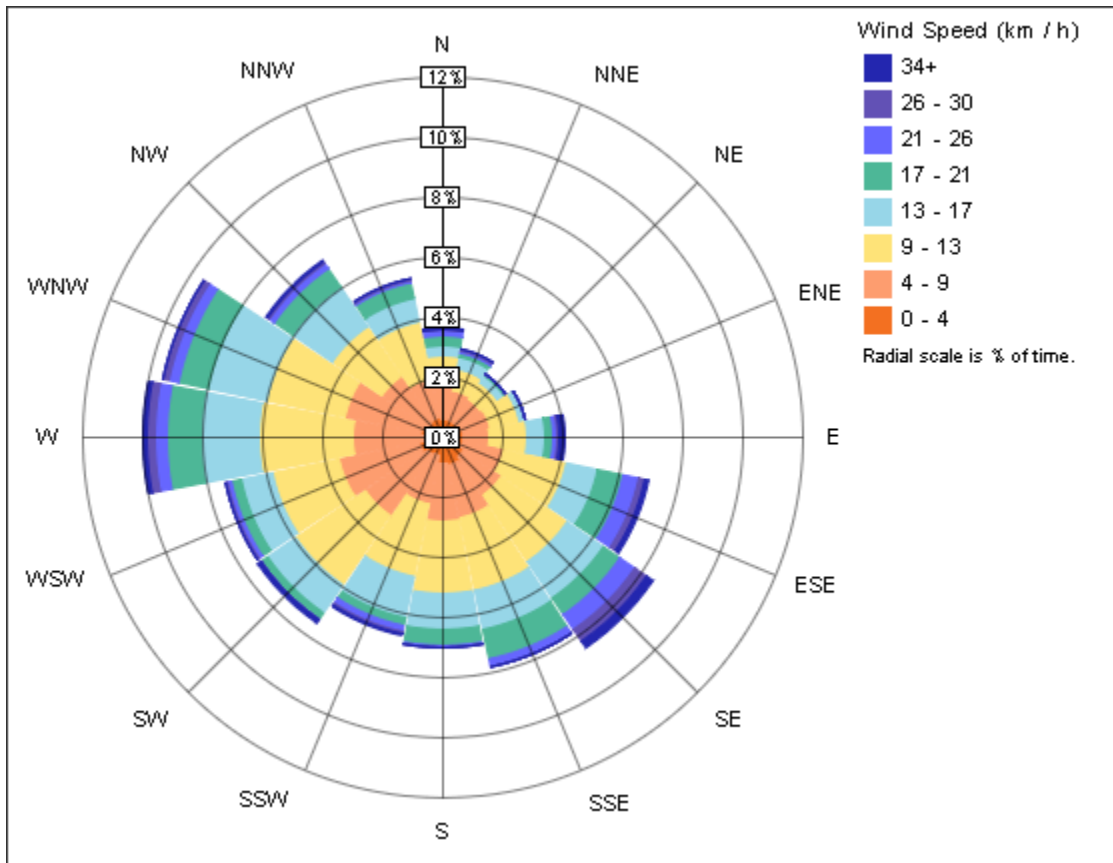
Monthly Electricity Consumption



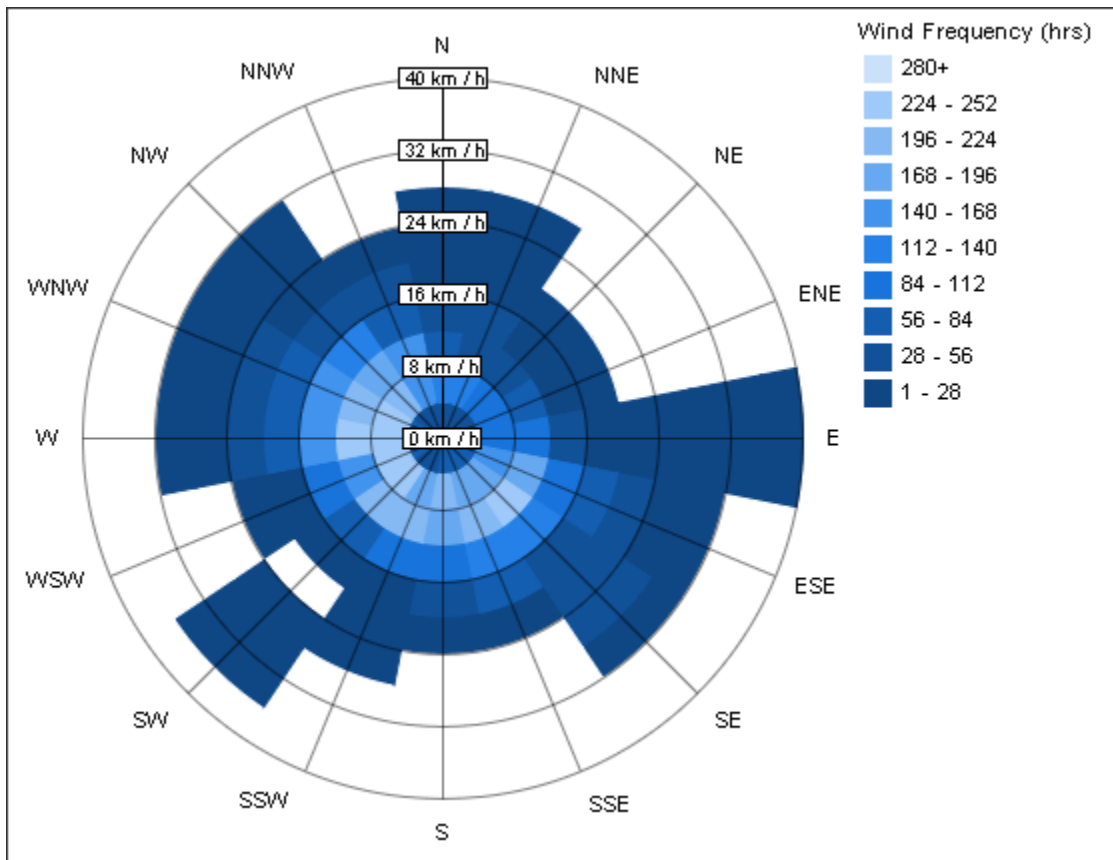
Monthly Peak Demand



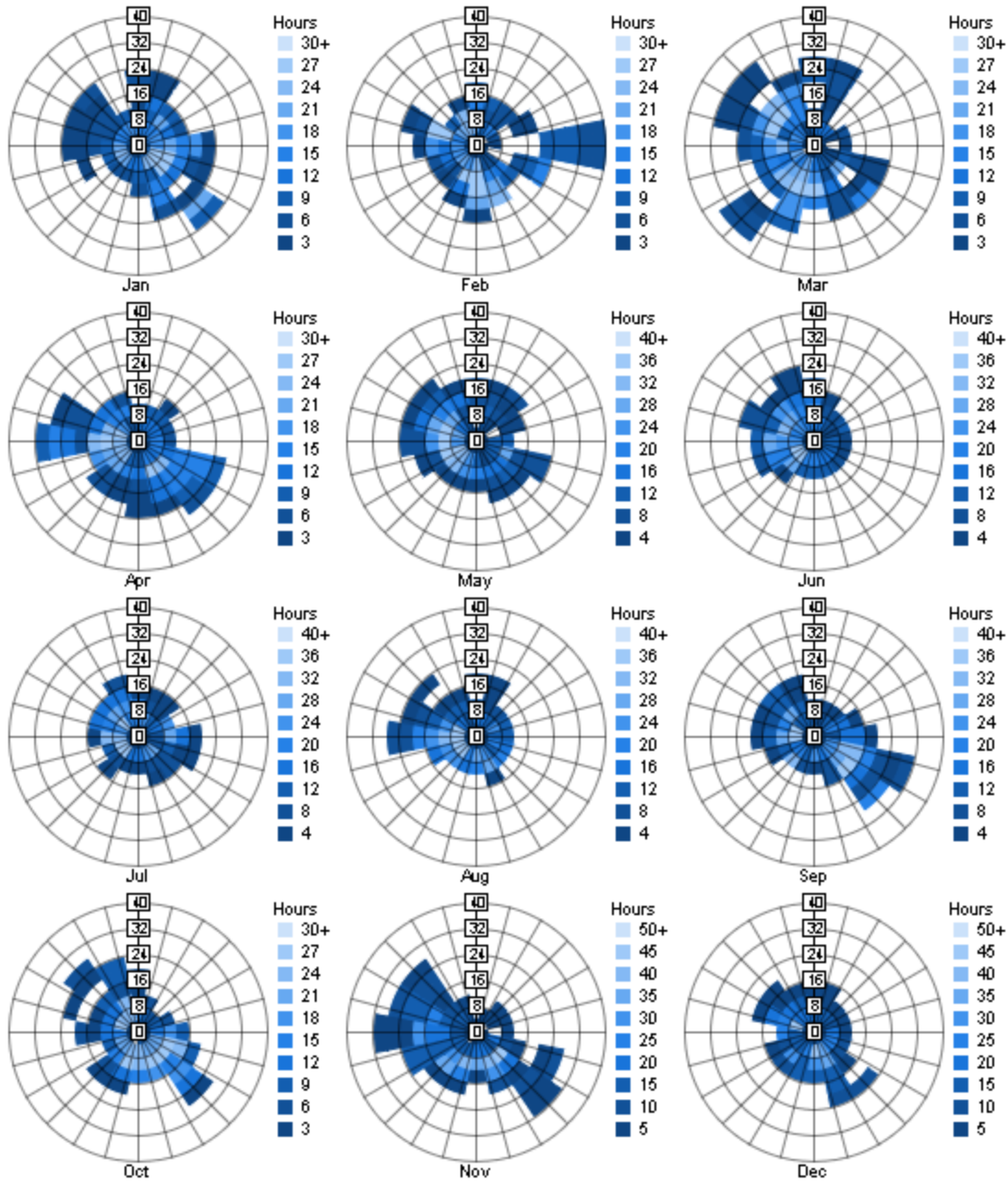
Annual Wind Rose (Speed Distribution)



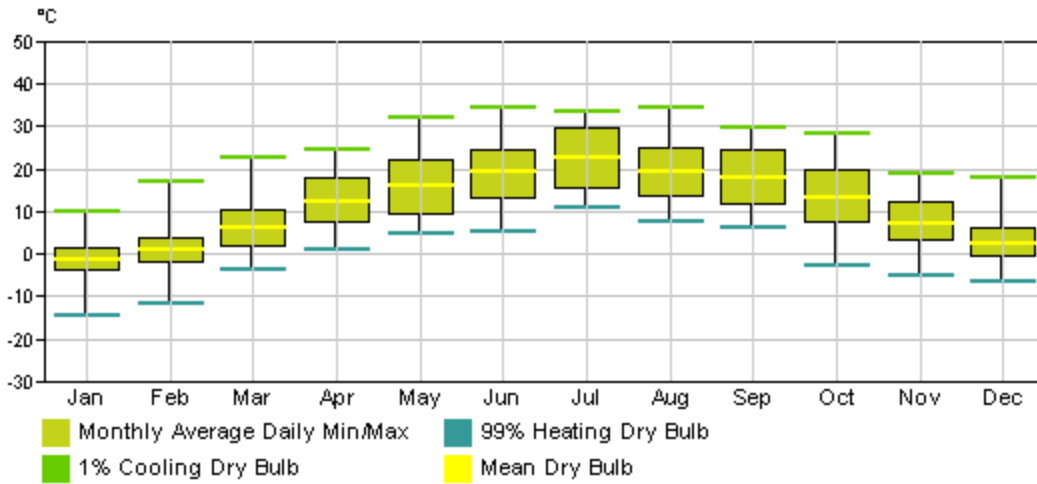
Annual Wind Rose (Frequency Distribution)



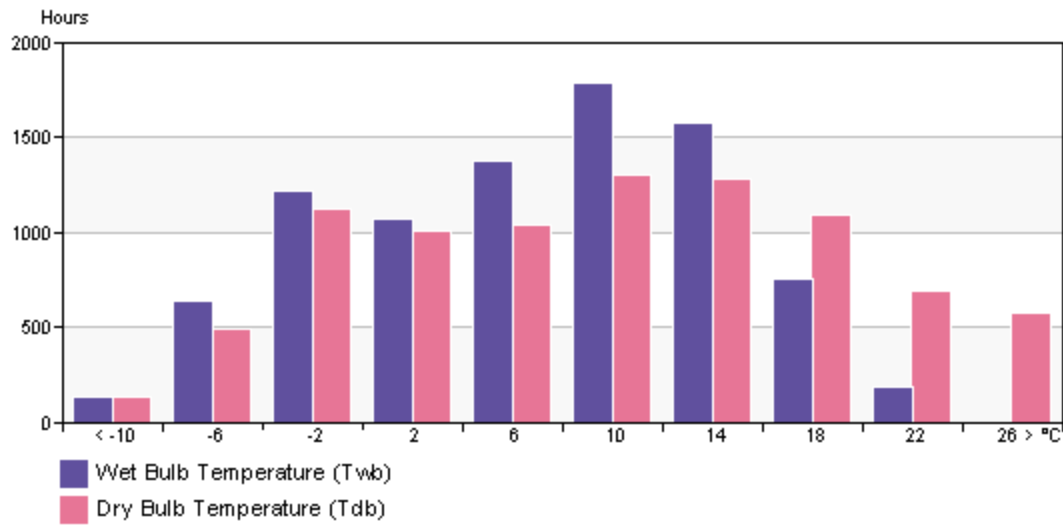
Monthly Wind Roses



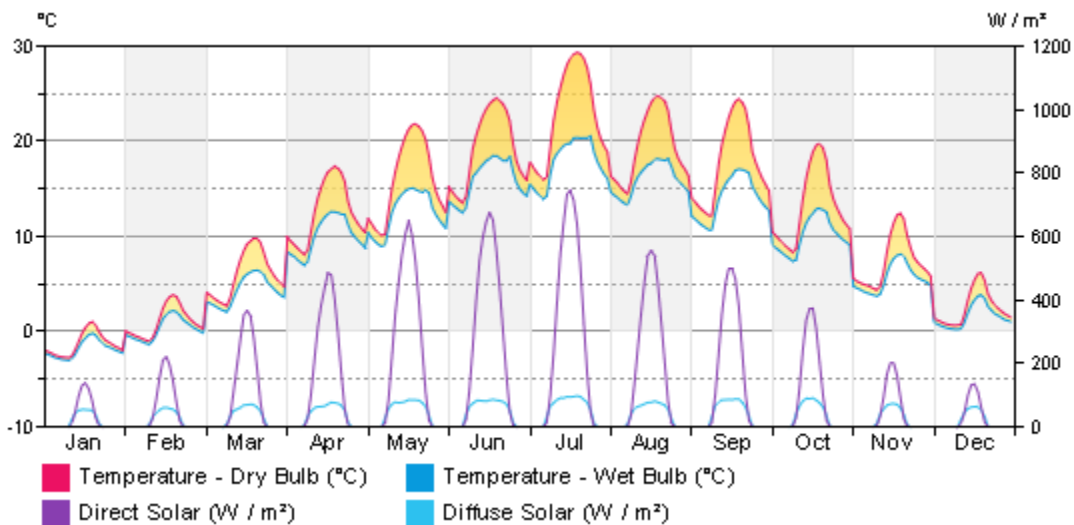
Monthly Design Data



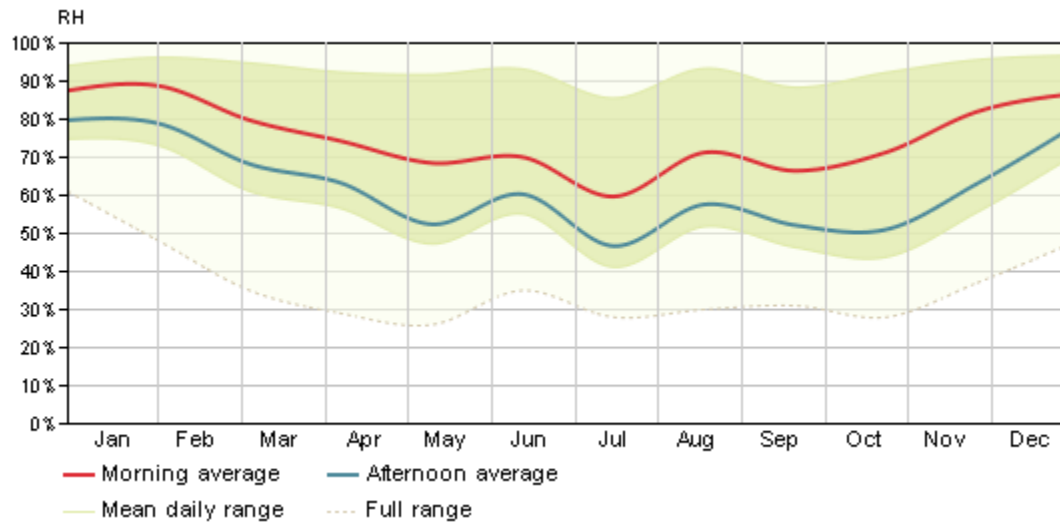
Annual Temperature Bins



Diurnal Weather Averages



Humidity



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Revit Conceptual Energy Analysis Data