Resultaten Energiesimulatie Westraven
Bestaande situatie

Program Version:EnergyPlus, Version 8.9.0-40101eaafd, YMD=2020.06.09 09:56
Tabular Output Report in Format: HTML
Building: Building
Environment: NLD NEN5060 Energie Verbruik ** DE BILT - NLD IWEC Data WMO#=062400
Simulation Timestamp: 2020-06-09 10:19:52

Report: Annual Building Utility Performance Summary
For: Entire Facility
Timestamp: 2020-06-09 10:19:52
Values gathered over 8760.00 hours

Site and Source Energy

	Total Energy [kWh]	Energy Per Total Building Area [kWh/m2]	Energy Per Conditioned Building Area [kWh/m2]
Total Site Energy	6043731.18	120.56	120.56
Net Site Energy	6043731.18	120.56	120.56
Total Source Energy	17176533.12	342.63	342.63
Net Source Energy	17176533.12	342.63	342.63

Site to Source Energy Conversion Factors

	Site=>Source Conversion Factor
Electricity	3.167
Natural Gas	1.084
District Cooling	1.056
District Heating	3.613
Steam	0.250
Gasoline	1.050
Diesel	1.050
Coal	1.050
Fuel Oil #1	1.050

Fuel Oil #2	1.050
Propane	1.050
Other Fuel 1	1.000
Other Fuel 2	1.000

Building Area

	Area [m2]
Total Building Area	50131.24
Net Conditioned Building Area	50131.24
Unconditioned Building Area	0.00

End Uses

	Electricity [kWh]	Natural Gas [kWh]	Additional Fuel [kWh]	District Cooling [kWh]	District Heating [kWh]	Water [m3]
Heating	0.00	0.00	0.00	0.00	1142872.46	0.00
Cooling	0.00	0.00	0.00	1180216.04	0.00	0.00
Interior Lighting	806899.69	0.00	0.00	0.00	0.00	0.00
Exterior Lighting	0.00	0.00	0.00	0.00	0.00	0.00
Interior Equipment	2856943.48	0.00	0.00	0.00	0.00	0.00
Exterior Equipment	0.00	0.00	0.00	0.00	0.00	0.00
Fans	671162.78	0.00	0.00	0.00	0.00	0.00
Pumps	192736.39	0.00	0.00	0.00	0.00	0.00
Heat Rejection	0.00	0.00	0.00	0.00	0.00	0.00
Humidification	0.00	0.00	0.00	0.00	0.00	0.00
Heat Recovery	0.00	0.00	0.00	0.00	0.00	0.00
Water Systems	0.00	0.00	0.00	0.00	39799.52	761.71
Refrigeration	0.00	0.00	0.00	0.00	0.00	0.00
Generators	0.00	0.00	0.00	0.00	0.00	0.00
Total End Uses	4527742.34	0.00	0.00	1180216.04	1182671.98	761.71

Note: District heat appears to be the principal heating source based on energy usage.

End Uses By Subcategory

	Subcategory	Electricity [kWh]	Natural Gas [kWh]	Additional Fuel [kWh]	District Cooling [kWh]	District Heating [kWh]	Water [m3]
Heating	General	0.00	0.00	0.00	0.00	1142872.46	0.00
Cooling	General	0.00	0.00	0.00	1180216.04	0.00	0.00
Interior Lighting	General	806899.69	0.00	0.00	0.00	0.00	0.00
Exterior Lighting	General	0.00	0.00	0.00	0.00	0.00	0.00
Interior Equipment	ELECTRIC EQUIPMENT#E01:VergaderE#05	58423.52	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#D02:KantoorD#05	178939.64	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#D01:VergaderD#05	59286.92	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#C02:KantoorC#05	181599.85	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#D05Techniek:Techniek#03	17169.60	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#E05Techniek:Techniek#03	17169.60	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#C05Techniek:Techniek#03	17169.60	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#C01:KeukenC#04	7038.60	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#SerreCDE:SerreCDE#05	5318.06	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#SerreCDE:SerreCDE#04	4786.25	0.00	0.00	0.00	0.00	0.00

	ELECTRIC EQUIPMENT#A01:KantoorA#05	234772.95	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#A05Techniek:Techniek#03	17169.60	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#B01:KantoorB#05	234772.95	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#B05Techniek:Techniek#03	17169.60	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#Auditorium:AuditoriumAB#05	354.86	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#SerreAB:SerreAB#05	3868.45	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#E02:KantoorE#05	176349.43	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#Lobby:LobbyOnverwarmd#05	4076.02	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H02:Zone1#05	67711.92	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H04:Zone1#05	73389.15	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H03:Zone1#05	73389.15	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H23Techniek:Techniek#03	100521.00	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H24Techniek:Techniek#03	16881.59	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H25Techniek:Techniek#03	8440.79	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H09:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H10:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H11:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00

	ELECTRIC EQUIPMENT#H16:Zone1#05	74310.11	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H17:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H18:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H19:Zone1#05	72263.53	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H20:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H12:Zone1#05	74310.11	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H13:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H14:Zone1#05	71344.46	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H15:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H21:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H22:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H05:Zone1#05	74310.11	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H06:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H07:Zone1#05	71342.57	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H08:Zone1#05	72263.53	0.00	0.00	0.00	0.00	0.00
	ELECTRIC EQUIPMENT#H01:GebouwH#05	3261.74	0.00	0.00	0.00	0.00	0.00
Exterior Equipment	General	0.00	0.00	0.00	0.00	0.00	0.00
Fans	Ventilation (simple)	0.00	0.00	0.00	0.00	0.00	0.00
Pumps	General	0.00	0.00	0.00	0.00	0.00	0.00
Heat Rejection	General	0.00	0.00	0.00	0.00	0.00	0.00

Humidification	General	0.00	0.00	0.00	0.00	0.00	0.00
Heat Recovery	General	0.00	0.00	0.00	0.00	0.00	0.00
Water Systems	DHW E01:VergaderE	0.00	0.00	0.00	0.00	806.64	15.44
	DHW D02:KantoorD	0.00	0.00	0.00	0.00	2112.54	40.43
	DHW D01:VergaderD	0.00	0.00	0.00	0.00	818.56	15.67
	DHW C02:KantoorC	0.00	0.00	0.00	0.00	2143.94	41.03
	DHW C01:KeukenC	0.00	0.00	0.00	0.00	1393.06	26.66
	DHW SerreCDE:SerreCDE	0.00	0.00	0.00	0.00	5262.66	100.72
	DHW A01:KantoorA	0.00	0.00	0.00	0.00	2771.70	53.05
	DHW B01:KantoorB	0.00	0.00	0.00	0.00	2771.70	53.05
	DHW Auditorium:AuditoriumAB	0.00	0.00	0.00	0.00	267.82	5.13
	DHW SerreAB:SerreAB	0.00	0.00	0.00	0.00	830.01	15.89
	DHW E02:KantoorE	0.00	0.00	0.00	0.00	2081.96	39.85
	DHW H02:Zone1	0.00	0.00	0.00	0.00	799.40	15.30
	DHW H04:Zone1	0.00	0.00	0.00	0.00	866.42	16.58
	DHW H03:Zone1	0.00	0.00	0.00	0.00	866.42	16.58
	DHW H09:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H10:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H11:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H16:Zone1	0.00	0.00	0.00	0.00	877.29	16.79

	DHW H17:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H18:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H19:Zone1	0.00	0.00	0.00	0.00	853.13	16.33
	DHW H20:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H12:Zone1	0.00	0.00	0.00	0.00	877.29	16.79
	DHW H13:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H14:Zone1	0.00	0.00	0.00	0.00	842.28	16.12
	DHW H15:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H21:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H22:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H05:Zone1	0.00	0.00	0.00	0.00	877.29	16.79
	DHW H06:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H07:Zone1	0.00	0.00	0.00	0.00	842.26	16.12
	DHW H08:Zone1	0.00	0.00	0.00	0.00	853.13	16.33
	DHW H01:GebouwH	0.00	0.00	0.00	0.00	719.13	13.76
Refrigeration	General	0.00	0.00	0.00	0.00	0.00	0.00
Generators	General	0.00	0.00	0.00	0.00	0.00	0.00

PERFORMANCE

Zone Summary

	Area [m2]	Conditioned (Y/N)	Part of Total	Volume [m3]	Multipliers	Above Ground	Underground Gross	Window Glass	Opening Area	Lighting [W/m2]	People [m2 per	Plug and Process
E01:VERGADERE	913.50	Yes	Yes	2831.85	1.00	273.56	0.00	93.24	93.24	12.00	20.83	37.00
D02:KANTOORD	2797.87	Yes	Yes	9488.19	1.00	477.71	0.00	163.46	163.46	12.00	20.83	37.00
D01:VERGADERD	927.00	Yes	Yes	2873.70	1.00	114.30	0.00	42.56	42.56	12.00	20.83	37.00
C02:KANTOORC	2839.46	Yes	Yes	9362.64	1.00	854.89	0.00	291.14	291.14	12.00	20.83	37.00
D05TECHNIEK:TECHNIEK	196.00	Yes	Yes	725.20	1.00	286.44	0.00	0.00	0.00	8.00	4.48	10.00
E05TECHNIEK:TECHNIEK	196.00	Yes	Yes	725.20	1.00	286.44	0.00	0.00	0.00	8.00	4.48	10.00
C05TECHNIEK:TECHNIEK	196.00	Yes	Yes	725.20	1.00	286.44	0.00	0.00	0.00	8.00	4.48	10.00
C01:KEUKENC	594.00	Yes	Yes	1841.40	1.00	108.38	0.00	38.08	38.08	12.00	1.89	25.00
SERRECDE:SERRECDE	2244.00	Yes	Yes	24205.97	1.00	2335.25	0.00	1761.61	1761.61	12.00	1.89	9.5000
A01:KANTOORA	3670.87	Yes	Yes	12194.49	1.00	1224.70	0.00	408.78	408.78	12.00	20.83	37.00
A05TECHNIEK:TECHNIEK	196.00	Yes	Yes	725.20	1.00	286.44	0.00	0.00	0.00	8.00	4.48	10.00
B01:KANTOORB	3670.87	Yes	Yes	12194.49	1.00	1100.49	0.00	420.96	420.96	12.00	20.83	37.00
B05TECHNIEK:TECHNIEK	196.00	Yes	Yes	725.20	1.00	286.44	0.00	0.00	0.00	8.00	4.48	10.00
AUDITORIUM:AUDITORIUMAB	361.07	Yes	Yes	1299.87	1.00	1.01	0.00	0.00	0.00	12.00	1.15	5.00
SERREAB:SERREAB	1119.00	Yes	Yes	11965.05	1.00	1501.62	0.00	1189.30	1189.30	12.00	1.15	2.00
E02:KANTOORE	2757.37	Yes	Yes	9362.64	1.00	946.56	0.00	315.40	315.40	12.00	20.83	37.00
LOBBY:LOBBYONVERWARMD	1179.04	Yes	Yes	14565.65	1.00	2343.54	0.00	2013.65	2013.65	8.00	1.15	2.00
H02:ZONE1	1058.73	Yes	Yes	3901.50	1.00	528.24	0.00	287.71	287.71	12.00	20.83	37.00
H04:ZONE1	1147.50	Yes	Yes	3901.50	1.00	548.26	0.00	288.75	288.75	12.00	20.83	37.00

H03:ZONE1	1147.50	Yes	Yes	3901.50	1.00	531.43	0.00	287.71	287.71	12.00	20.83	37.00
H23TECHNIEK:TECHNIEK	1147.50	Yes	Yes	3901.50	1.00	633.01	0.00	393.55	393.55	8.00	4.48	10.00
H24TECHNIEK:TECHNIEK	192.71	Yes	Yes	963.56	1.00	305.44	0.00	0.00	0.00	8.00	4.48	10.00
H25TECHNIEK:TECHNIEK	192.71	Yes	Yes	597.41	1.00	202.51	0.00	0.00	0.00	8.00	4.48	5.00
H09:ZONE1	1115.50	Yes	Yes	3950.46	1.00	661.48	0.00	370.57	370.57	12.00	20.83	37.00
H10:ZONE1	1115.50	Yes	Yes	3950.46	1.00	661.48	0.00	370.59	370.59	12.00	20.83	37.00
H11:ZONE1	1115.50	Yes	Yes	3950.46	1.00	664.39	0.00	367.11	367.11	12.00	20.83	37.00
H16:ZONE1	1161.90	Yes	Yes	3950.46	1.00	670.03	0.00	367.11	367.11	12.00	20.83	37.00
H17:ZONE1	1115.50	Yes	Yes	3950.46	1.00	660.75	0.00	370.59	370.59	12.00	20.83	37.00
H18:ZONE1	1115.50	Yes	Yes	3950.46	1.00	660.75	0.00	370.59	370.59	12.00	20.83	37.00
H19:ZONE1	1129.90	Yes	Yes	3999.42	1.00	676.00	0.00	376.45	376.45	12.00	20.83	37.00
H20:ZONE1	1115.50	Yes	Yes	3950.46	1.00	661.48	0.00	370.59	370.59	12.00	20.83	37.00
H12:ZONE1	1161.90	Yes	Yes	3950.46	1.00	670.76	0.00	367.10	367.10	12.00	20.83	37.00
H13:ZONE1	1115.50	Yes	Yes	3950.46	1.00	661.48	0.00	370.57	370.57	12.00	20.83	37.00
H14:ZONE1	1115.53	Yes	Yes	3950.46	1.00	661.48	0.00	370.58	370.58	12.00	20.83	37.00
H15:ZONE1	1115.50	Yes	Yes	3950.46	1.00	664.39	0.00	367.12	367.12	12.00	20.83	37.00
H21:ZONE1	1115.50	Yes	Yes	3950.46	1.00	661.48	0.00	370.58	370.58	12.00	20.83	37.00
H22:ZONE1	1115.50	Yes	Yes	3950.46	1.00	664.39	0.00	367.12	367.12	12.00	20.83	37.00
H05:ZONE1	1161.90	Yes	Yes	3950.46	1.00	670.77	0.00	367.14	367.14	12.00	20.83	37.00
H06:ZONE1	1115.50	Yes	Yes	3950.46	1.00	661.48	0.00	370.58	370.58	12.00	20.83	37.00
H07:ZONE1	1115.50	Yes	Yes	3950.46	1.00	661.48	0.00	370.58	370.58	12.00	20.83	37.00

H08:ZONE1	1129.90	Yes	Yes	3999.42	1.00	676.73	0.00	376.45	376.45	12.00	20.83	37.00
H01:GEBOUWH	943.50	Yes	Yes	4528.80	1.00	678.22	0.00	490.20	490.20	12.00	1.89	2.00
Total	50131.24			208713.92		28112.19	0.00	151477.55	151477.55	11.7054	7.32	31.7606
Conditioned Total	50131.24			208713.92		28112.19	0.00	151477.55	151477.55	11.7054	7.32	31.7606
Unconditioned Total	0.00			0.00		0.00	0.00	0.00	0.00			
Not Part of Total	0.00			0.00		0.00	0.00	0.00	0.00			