Measure Name	Measure Value	% Energy Savings	% GHG Savings	% Peak Savings	npv_total_per_m_sq	bc_step_code_tedi_kwh_per_m_sq	Envelope ($/m2)	Heating & Cooling ($/m2)	Lighting ($/m2)	SHW ($/m2)	Ventilation & Ductwork ($/m2)	Total ($/m2)
:shw_scale	0.25	28.30	46.70	4.30	641.95	22.22	0.00	0.00	0.00	4.70	0.00	4.70
:shw_scale	0.5	18.20	30.10	1.90	654.92	21.67	0.00	0.00	0.00	4.70	0.00	4.70
:shw_scale	0.75	9.80	16.30	0.80	670.28	21.15	0.00	0.00	0.00	0.20	0.00	0.20
:erv_package	Plate-All	7.50	12.80	0.10	675.19	10.64	0.00	0.00	0.00	0.00	-1.60	-1.60
:erv_package	Rotary-All	7.20	12.60	0.20	675.71	10.79	0.00	0.00	0.00	0.00	-1.60	-1.60
:dcv_type	CO2_based_DCV	6.90	13.60	0.60	688.72	9.77	0.00	0.00	0.00	0.00	-13.30	-13.30
:erv_package	Plate-Existing	6.70	10.90	0.20	674.32	11.99	0.00	0.00	0.00	0.00	0.00	0.00
:erv_package	Rotary-Existing	6.40	10.70	0.30	674.83	12.12	0.00	0.00	0.00	0.00	0.00	0.00
:fixed_wind_solar_trans	0.2	5.30	-9.20	23.40	648.65	28.62	-2.60	16.80	0.00	0.00	1.20	15.50
:fixed_wind_solar_trans	0.3	4.80	-6.10	17.40	660.68	26.04	-5.70	11.80	0.00	0.00	0.70	6.80
:electrical_loads_scale	0.5	4.70	-2.40	12.70	669.70	23.12	0.00	0.40	0.00	0.00	0.00	0.40
:fixed_wind_solar_trans	0.4	3.50	-3.60	11.10	668.71	23.85	-3.00	7.00	0.00	0.00	-0.50	3.50
:nv_type	add_nv	2.50	0.30	-2.80	701.06	20.79	0.00	0.00	0.00	0.00	-23.80	-23.80
:lights_scale	0.50	2.40	-1.60	10.70	676.42	22.21	0.00	-0.30	0.00	0.00	0.00	-0.30
:fixed_wind_solar_trans	0.5	1.80	-1.50	5.20	679.22	22.07	-3.00	3.00	0.00	0.00	-1.60	-1.70
:infiltration_scale	0.5	1.70	2.90	0.20	679.35	18.34	0.00	1.60	0.00	0.00	0.00	1.60
:fixed_window_cond	1.6	1.30	2.50	-0.10	719.72	18.73	-38.80	0.40	0.00	0.00	0.00	-38.30
:shw_eff	Natural Gas Power Vent with Electric Ignition	1.20	2.10	0.00	681.44	20.63	0.00	0.00	0.00	0.00	0.00	0.00
:boiler_eff	Viessmann Vitocrossal 300 CT3-17 96.2% Efficient Condensing Gas Boiler	1.10	1.80	0.00	681.66	20.63	0.00	0.00	0.00	0.00	0.00	0.00
:dcv_type	Occupancy_based_DCV	1.00	1.70	0.00	688.07	19.29	0.00	0.00	0.00	0.00	-6.30	-6.30
:daylighting_type	add_daylighting_controls	0.90	-0.10	8.70	689.14	20.84	0.00	0.00	-8.40	0.00	0.00	-8.40
:ground_floor_cond	0.379	0.80	2.50	-1.90	694.06	18.72	-10.20	-0.80	0.00	0.00	-0.20	-11.30
:ext_wall_cond	0.183	0.70	1.20	0.20	694.29	19.74	-12.70	0.40	0.00	0.00	0.00	-12.30
:ext_roof_cond	0.121	0.60	0.70	0.20	696.79	20.10	-13.00	0.30	0.00	0.00	-2.10	-14.80
:erv_package	NECB_Default_All	0.50	1.30	-0.10	684.30	19.71	0.00	0.00	0.00	0.00	-1.60	-1.60
:ext_wall_cond	0.21	0.50	0.90	0.10	691.13	19.96	-9.30	0.40	0.00	0.00	0.00	-8.90
:ext_roof_cond	0.138	0.40	0.40	0.10	689.64	20.31	-7.60	0.30	0.00	0.00	0.00	-7.30
:ext_roof_cond	0.142	0.30	0.40	0.10	688.89	20.36	-6.70	0.30	0.00	0.00	0.00	-6.40
:ext_wall_cond	0.247	0.30	0.50	0.10	686.24	20.27	-4.00	0.30	0.00	0.00	0.00	-3.70
:adv_dx_units	Lennox Model L Ultra High Efficiency	0.10	0.00	1.20	683.07	20.63	0.00	0.00	0.00	0.00	-0.40	-0.40
	0.278	0.10	0.10	0.00	682.99	20.53	-0.20	0.00	0.00	0.00	0.00	-0.10
:ext_wall_cond	0.314	-0.20	-0.30	0.00	682.90	20.84	0.30	0.00	0.00	0.00	0.00	0.30
:ext_roof_cond	0.183	-0.30	-0.30	-0.10	682.14	20.87	1.30	0.00	0.00	0.00	0.00	1.30
:ext_roof_cond	0.193	-0.40	-0.50	-0.10	678.42	21.00	5.20	-0.20	0.00	0.00	0.00	5.20
:ext_roof_cond	0.227	-0.90	-1.10	-0.30	676.04	21.44	8.80	-0.20	0.00	0.00	-0.20	8.40
:fixed_window_cond	2.2	-1.50	-2.60	0.10	656.79	22.65	28.20	-0.20	0.00	0.00	0.00	28.00
:fixed_window_cond	2.4	-2.50	-4.40	0.10	646.42	24.05	42.20	-2.60	0.00	0.00	0.00	39.60
:airloop_economizer_type	DifferentialDryBulb	-14.20	-28.00	0.00	698.09	42.41	0.00	0.00	0.00	0.00	0.00	0.00
:airloop_economizer_type	DifferentialEnthalpy	-14.20	-28.00	0.00	698.18	42.41	0.00	0.00	0.00	0.00	0.00	0.00
:ecm_system_name	HS09_CCASHP_Baseboard	0.00	0.00	0.00	693.76	20.91	0.00	0.00	0.00	0.00	0.00	0.00
:ecm_system_name	HS12_ASHP_Baseboard	0.00	0.00	0.00	671.63	20.90	0.00	0.00	0.00	0.00	0.00	0.00
:ecm_system_name	HS08_CCASHP_VRF	0.00	0.00	0.00	813.98	25.78	0.00	0.00	0.00	0.00	0.00	0.00
:ecm_system_name	HS14_CGSHP_FanCoils	0.00	0.00	0.00	879.81	25.93	0.00	0.00	0.00	0.00	0.00	0.00
:ecm_system_name	HS13_ASHP_VRF	0.00	0.00	0.00	790.57	25.78	0.00	0.00	0.00	0.00	0.00	0.00
:ecm_system_name	HS11_ASHP_PTHP	0.00	0.00	0.00	663.30	25.80	0.00	0.00	0.00	0.00	0.00	0.00

Scatter plot — y-axis: cost_equipment_total_cost_per_m_sq; x-axis: baseline_energy_percent_better

Legend: :erv_package
- Rotary-All
- NECB_Default_All
- Rotary-Existing
- Plate-All
- Plate-Existing
- NECB_Default

Bar chart — Sensitivity of :erv_package by EUI; y-axis: GJ/m2; x-axis: :erv_package

Legend:
- energy_eui_cooling_gj_per_m_sq
- energy_eui_heating_gj_per_m_sq
- energy_eui_fans_gj_per_m_sq
- energy_eui_heat_recovery_gj_per_m_sq
- energy_eui_interior_lighting_gj_per_m_sq
- energy_eui_interior_equipment_gj_per_m_sq
- energy_eui_water_systems_gj_per_m_sq
- energy_eui_pumps_gj_per_m_sq

Categories: NECB_Default, NECB_Default_All, Plate-All, Plate-Existing, Rotary-All, Rotary-Existing

Sensitivity of :erv_package by Costing

Sensitivity of :shw_eff by EUI

Sensitivity of :shw_eff by Costing

Sensitivity of :dcv_type by EUI

Sensitivity of :dcv_type by Costing

Sensitivity of :infiltration_scale by EUI

Sensitivity of :infiltration_scale by Costing

Sensitivity of :electrical_loads_scale by EUI

Sensitivity of :electrical_loads_scale by Costing

Sensitivity of :nv_type by EUI

Sensitivity of :nv_type by Costing

Sensitivity of :ext_wall_cond by EUI

Sensitivity of :ext_wall_cond by Costing

Sensitivity of :chiller_type by EUI

Sensitivity of :chiller_type by Costing

Sensitivity of :ext_roof_cond by EUI

Sensitivity of :ext_roof_cond by Costing

Legend:
- cost_equipment_heating_and_cooling_total_cost_per_m_sq
- cost_equipment_lighting_total_cost_per_m_sq
- cost_equipment_shw_total_cost_per_m_sq
- cost_equipment_ventilation_total_cost_per_m_sq
- cost_equipment_thermal_bridging_total_cost_per_m_sq
- cost_equipment_envelope_total_cost_per_m_sq

$/M2

:ext_roof_cond	envelope	ventilation	shw	lighting	heating_and_cooling
0.121	338.832	57.324	9.807	40.689	78.878
0.138	333.378	55.235	9.807	40.689	78.878
0.142	332.533	55.24	9.807	40.689	78.878
0.162	325.986	55.261	9.807	40.689	79.16
0.183	324.507	55.284	9.807	40.689	79.16
0.193	320.543	55.294	9.807	40.689	79.16
0.227	317.022	55.463	9.807	40.689	79.328
NECB_Default	325.792	55.263	9.807	40.689	79.16

:ext_roof_cond

:lights_scale
- 0.5
- 1.0

cost_equipment_total_cost_per_m_sq (y-axis: 510.70 – 511.05)
baseline_energy_percent_better (x-axis: 0.0 – 2.5)

Sensitivity of :lights_scale by EUI

Legend:
- energy_eui_cooling_gj_per_m_sq
- energy_eui_heating_gj_per_m_sq
- energy_eui_fans_gj_per_m_sq
- energy_eui_heat recovery_gj_per_m_sq
- energy_eui_interior lighting_gj_per_m_sq
- energy_eui_interior equipment_gj_per_m_sq
- energy_eui_water systems_gj_per_m_sq
- energy_eui_pumps_gj_per_m_sq

GJ/M2

:lights_scale	cooling	heating	fans	heat recovery	interior lighting	interior equipment	water systems	pumps
0.5	0.059	0.084	0.063	0.009	0.018	0.063	0.207	0.006
1.0	0.061	0.078	0.061	0.009	0.036	0.063	0.207	

:lights_scale

Sensitivity of :lights_scale by Costing

Sensitivity of :daylighting_type by EUI

Sensitivity of :daylighting_type by Costing

:boiler_eff

Sensitivity of :boiler_eff by EUI

Sensitivity of :boiler_eff by Costing

Sensitivity of :adv_dx_units by EUI

Sensitivity of :adv_dx_units by Costing

Sensitivity of :ecm_system_name by EUI

Sensitivity of :ecm_system_name by Costing

Sensitivity of :airloop_economizer_type by EUI

Sensitivity of :airloop_economizer_type by Costing

Sensitivity of :fixed_wind_solar_trans by EUI

Sensitivity of :fixed_wind_solar_trans by Costing

Sensitivity of :fixed_window_cond by EUI

Sensitivity of :fixed_window_cond by Costing

Sensitivity of :shw_scale by EUI

Sensitivity of :shw_scale by Costing

Sensitivity of :ground_floor_cond by EUI

Sensitivity of :ground_floor_cond by Costing