

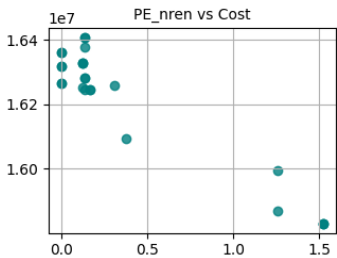
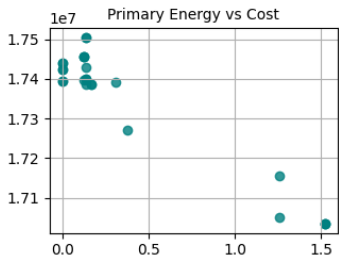
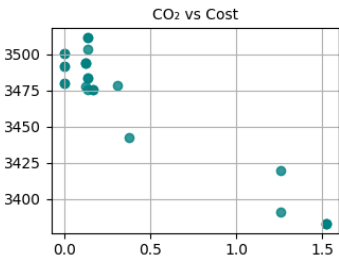
Scenario: Scenario One

In this scenario:

- About 10% of buildings have photovoltaics installed on their rooftops.
- Around 5% of buildings have thermal solar panels.

Key Performance Metrics:

Metric	Mean	Max	Min	Std. Dev
Cost (€)	376533.15	1522441.97	0.00	530917.16
Primary Energy (kWh)	17346112.51	17505352.94	17035239.33	150169.06
Non-Renewable PE (kWh)	16212560.31	16408284.30	15829050.34	184832.75
CO ₂ Emission (tons)	3468.18	3511.67	3383.08	41.01



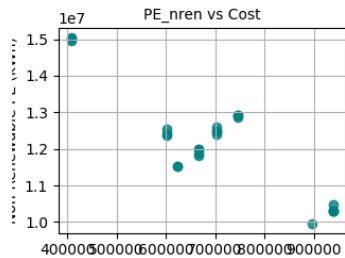
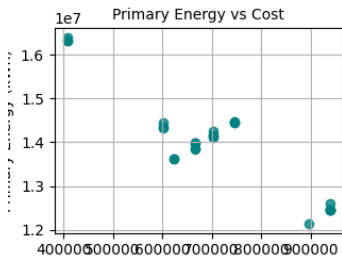
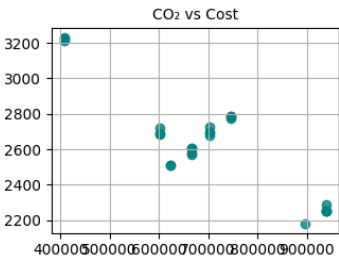
Scenario: Scenario Two

In this scenario:

- 50% of buildings received HVAC system upgrades.
- Around 5% of buildings have thermal solar panels.

Key Performance Metrics:

Metric	Mean	Max	Min	Std. Dev
Cost (€)	703565.14	939095.14	408388.47	158895.73
Primary Energy (kWh)	13989869.35	16400048.86	12144905.47	1147470.64
Non-Renewable PE (kWh)	12139163.77	15053221.64	9962367.68	1404149.16
CO ₂ Emission (tons)	2630.64	3232.45	2181.27	289.19



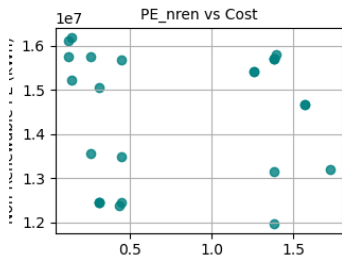
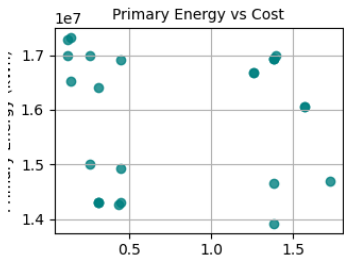
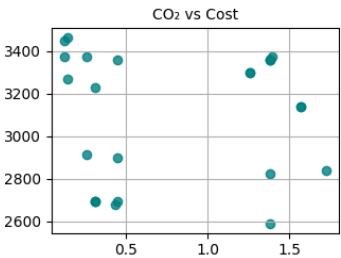
Scenario: Scenario Three

In this scenario:

- About 30% of buildings have photovoltaics installed on their rooftops.
- 5% of buildings received deep retrofit interventions.

Key Performance Metrics:

Metric	Mean	Max	Min	Std. Dev
Cost (€)	789078.26	1725108.56	121002.46	578404.79
Primary Energy (kWh)	15855498.39	17329623.07	13918636.21	1186984.87
Non-Renewable PE (kWh)	14419452.84	16198516.14	11979223.18	1437074.63
CO ₂ Emission (tons)	3094.08	3465.45	2589.46	296.20



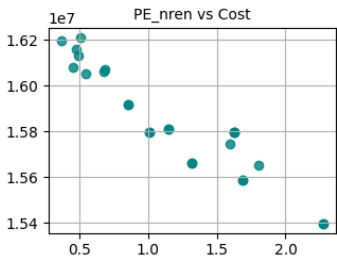
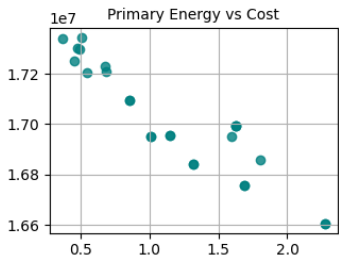
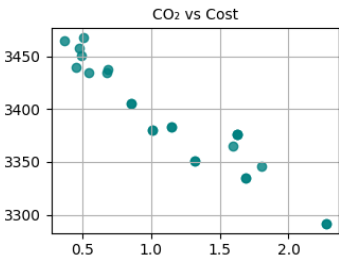
Scenario: Scenario Four

In this scenario:

- About 10% of buildings have photovoltaics installed on their rooftops.
- 15% of buildings underwent envelope insulation improvements.

Key Performance Metrics:

Metric	Mean	Max	Min	Std. Dev
Cost (€)	1163137.54	2271261.16	369754.46	561161.00
Primary Energy (kWh)	17014891.89	17344654.00	16606201.39	213148.59
Non-Renewable PE (kWh)	15843141.92	16210627.84	15397907.79	228195.02
CO ₂ Emission (tons)	3388.73	3468.12	3291.75	49.44



Scenario: Scenario Five

In this scenario:

- About 10% of buildings have photovoltaics installed on their rooftops.
- 15% of buildings received deep retrofit interventions.
- 23% of buildings underwent envelope insulation improvements.

Key Performance Metrics:

Metric	Mean	Max	Min	Std. Dev
Cost (€)	1508010.85	3181491.15	121002.46	850133.93
Primary Energy (kWh)	16377540.20	17152923.87	14238620.11	797317.25
Non-Renewable PE (kWh)	15137019.14	16022921.29	12420528.18	938023.14
CO ₂ Emission (tons)	3242.37	3428.18	2687.97	194.08

