

Supplementary Information

Tracking and Assessing Cities' SDG Progress and Pathways to Greater Ambition: the Cases of London, New York City, and Shanghai

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Supplementary Tables

Supplementary Table 1: Indicators and their 2030 Benchmarks in London and the United Kingdom.

Number	Indicator	2030 London Benchmark	2030 UK Benchmark
3.1.1	Maternal mortality ratio	-	End preventable deaths of mothers, babies and children
3.2.1	Under-five mortality rate	-	End preventable deaths of mothers, babies and children
3.2.2	Neonatal mortality rate	-	End preventable deaths of mothers, babies and children
3.3.1	New HIV infections	Reduce new infection incidence to zero	Reduce new infection incidence to zero
3.3.2	Tuberculosis incidence	-	Reduce new infection incidence to zero by 2035
3.3.4	Hepatitis B incidence	-	Reduce new infection incidence to zero
3.4.1	Non-communicable disease mortality	-	Eliminate cervical cancer by 2040 and reduce premature (<70) cardiovascular disease mortality
3.4.2	Suicide mortality rate	Reduce deaths to zero	Reduce the suicide rate by 2028
3.5.2	Alcohol per capita consumption	-	Reduce the number of adults drinking above NHS guidelines
7.2.1	Renewable energy	Deploy 1,500 MW of rooftop solar power	100% clean electricity
11.1.1	Housing	End rough sleeping	Halve long-term rough sleeping
11.6.1	Solid waste management	Recycle 65% of municipal waste	By 2042, reduce trash production to 287kg per capita
11.6.2	Air quality	Reduce annual mean concentrations to $\leq 10 \mu\text{g}/\text{m}^3$	Reduce annual mean concentrations to $\leq 10 \mu\text{g}/\text{m}^3$ by 2040
11.7.1	Green space	Ratio of 0.06 Ha of public open space per 1,000 weekday day-time population	-
11.7.2	Street harassment	-	Halve violence against women and girls compared with 2025
13.2.1	City climate action	Net zero emissions	-
13.2.2	Emissions	Net zero emissions	Net zero emissions by 2050

Supplementary Table 2: Indicators and their 2030 Benchmarks in New York City and the United States.

Number	Indicator	2030 NYC Benchmark	2030 US Benchmark
3.1.1	Maternal mortality ratio	Reduce pregnancy mortality for Black women by 10%	Reduce to 15.7 deaths per 100,000 live births
3.2.1	Under-five mortality rate	-	Reduce to five infant deaths per 1,000 live births
3.3.1	New HIV infections	Reduce the number of new HIV diagnoses by 55%	Reduce new diagnoses to 183 people
3.3.2	Tuberculosis incidence	Prevent the transmission of tuberculosis	Reduce new cases to 1.4 per 100,000 population
3.3.4	Hepatitis B incidence	Reduce to 0.8 deaths per 100,000 AAPI individuals	Reduce new cases to 0.1 per 100,000 population
3.4.1	Non-communicable disease mortality	Reduce heart disease and diabetes deaths by 5% and reduce screenable cancer deaths by 20%	Reduce to 71.1 heart disease deaths and 122.7 cancer deaths per 100,000 population
3.4.2	Suicide mortality rate	Reduce suicide deaths by 10%	Reduce to 12.8 suicides per 100,000 population
3.8.1	Health insurance	-	92.4% of people under 65 years covered by insurance
7.2.1	Renewable energy	100% clean energy by 2040 and deploy 1,000 MW of solar power	100% carbon-free electricity
11.1.1	Housing	Reach permanent housing for all by 2026	Reduce homelessness by 25% by 2025 compared with 2022 levels
11.2.1	Public transport	95% accessible stations by 2055	-
11.5.1	Natural disaster mortality and impacts	-	Reduce substantially
11.5.2	Natural disaster economic loss	-	Reduce substantially
11.6.1	Solid waste management	Cut waste collected by 90% compared with 2005 levels	Recycling rate of 50%
11.6.2	Air quality	Reduce PM2.5 concentrations by 20% compared with 2013	Reduce annual mean concentrations to 9 µg/m ³
13.1.1	Natural disaster mortality and impacts	-	Reduce substantially
13.2.1	City climate action	Reduce emissions by 30% below 2005 levels	-

13.2.2	Emissions	Reduce emissions by 30% below 2005 levels	Reduce emissions by 50–52% below 2005 levels
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Supplementary Table 3: Indicators and their 2030 Benchmarks in Shanghai and the China.

Number	Indicator	2030 Shanghai Benchmark	2030 China Benchmark
3.1.1	Maternal mortality ratio	Mortality ratio at the level of developed countries	Reduce to 12 per 100,000 live births
3.2.1	Under-five mortality rate	Mortality ratio at the level of developed countries	Reduce to 6.0 per 1,000 live births
3.2.2	Neonatal mortality rate	Neonatal mortality ratio at the level of developed countries	Reduce to 5.0 per 1,000 live births
3.3.1	New HIV infections	Incidence rate <2.2 per 100,000 population	Share of population with positive status <0.2%
3.3.2	Tuberculosis incidence	Incidence rate <18 per 100,000 population	Incidence rate <43 per 100,000 population
3.3.3	Malaria incidence	Reduce incidence to zero	Reduce incidence to zero
3.4.1	Non-communicable disease mortality	Reduce the chronic respiratory disease mortality rate to <6.2 and the cardiovascular and cerebrovascular disease rate to <160 per 100,000 population	Reduce the chronic respiratory disease mortality rate to 8.1 and the cardiovascular disease rate to 190.7 per 100,000
3.8.2	Household expenditures on healthcare	Keep out-of-pocket share of total health expenditures <20%	Keep out-of-pocket share of total health expenditures <25%
7.1.1	Electricity access	-	Achieve universal energy access
7.2.1	Renewable energy	Increase non-fossil energy as a percentage of total energy consumption	Reach 25% non-fossil fuels as a share of primary energy consumption
7.3.1	Energy efficiency	-	By 2025, reduce energy consumption/GDP by 13.5% compared with 2020 levels
11.5.1	Natural disaster mortality and impacts	-	By 2025, keep the mortality rate below one per million population and the number of people affected by disasters below 15,000 per 100,000 population
11.6.1	Solid waste management	Reach a 50% household waste recycling rate	Increase resource utilization of municipal solid waste to reach 65%
11.6.2	Air quality	Reduce PM2.5 to <26.36 µg/m ³	Reduce PM2.5 to <27 µg/m ³

11.7.1	Green space	Reach 10.5 m ² per capita of park green space	Reach 14.6 m ² per capita of green space by 2020
13.1.1	Natural disaster mortality and impacts	-	By 2025, keep the mortality rate below one per million population and the number of people affected by disasters below 15,000 per 100,000 population
13.2.1	City climate action	Reduce CO ₂ /GDP by 70% compared with 2005 levels	-
13.2.2	Emissions	Reduce CO ₂ /GDP by 70% compared with 2005 levels	Reduce CO ₂ /GDP by 65% compared with 2005 levels

Supplementary Table 4: Decomposed indicator-level contributions to UN Benchmark attainment in London.

SDG Indicator	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.1.1	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.2.1	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.2.2	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.3.1	0.013	0.020	0.023	0.025	0.029	0.031	0.026	0.028	0.030
3.3.2	0.001	0.001	0.001	0.007	0.015	0.014	0.015	0.013	0.007
3.3.3	0.001	0.001	0.007	0.004	0.039	0.026	0.011	-0.001	-0.001
3.3.4	0.001	0.009	0.014	0.023	0.028	0.036	0.034	0.034	0.034
3.4.1	0.005	0.005	0.004	0.005	0.007	0.010	0.006	0.005	0.009
3.4.2	0.035	0.038	0.017	0.028	0.044	0.049	0.045	0.038	0.020
3.5.1	-0.001	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.001	0.000
3.5.2	-0.006	-0.009	-0.012	-0.009	-0.009	-0.017	-0.017	-0.017	-0.017
3.7.1	-0.001	-0.003	-0.004	-0.006	-0.007	-0.009	-0.009	-0.009	-0.009
3.7.2	0.015	0.025	0.042	0.044	0.052	0.056	0.056	0.056	0.056
3.8.1	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.8.2	0.000	0.000	0.009	-0.004	-0.007	-0.007	-0.035	-0.022	0.007
3.9.1	0.005	0.007	0.018	0.018	0.027	0.030	0.030	0.040	0.042
3.9.2	0.011	0.011	0.008	0.023	0.035	0.048	0.042	0.031	0.038
3.9.3	0.007	0.031	-0.018	-0.019	-0.003	-0.005	-0.018	-0.024	-0.056
7.1.1	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
7.2.1	-0.070	-0.055	-0.042	-0.033	-0.014	-0.021	0.000	0.003	0.012

7.3.1	-0.261	-0.235	-0.183	-0.155	-0.180	-0.089	0.000	0.060	0.060
11.1.1	0.001	0.003	0.001	-0.002	-0.006	0.001	0.000	-0.010	-0.027
11.2.1	0.003	0.007	0.011	0.013	0.006	0.008	0.020	0.011	0.010
11.5.1	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
11.5.2	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
11.6.1	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.002	-0.002	-0.002
11.6.2	-0.008	-0.002	0.010	0.009	0.032	0.041	0.043	0.062	0.062
11.7.1	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
11.7.2	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017
13.2.2	0.090	0.170	0.193	0.260	0.388	0.311	0.401	0.478	0.478

Supplementary Table 5: Decomposed indicator-level contributions to UN Benchmark attainment in New York City.

SDG Indicator	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.1.1	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.2.1	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.2.2	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.3.1	0.003	0.008	0.010	0.013	0.022	0.019	0.019	0.016	0.015
3.3.2	0.003	-0.003	0.003	0.002	0.016	0.008	0.006	-0.012	-0.028
3.3.3	-0.012	-0.008	-0.002	-0.012	0.039	-0.001	-0.008	-0.041	-0.012
3.3.4	-0.005	0.004	0.011	0.012	0.026	0.018	0.016	0.005	-0.001
3.4.1	0.000	-0.001	-0.002	0.000	-0.014	0.014	0.013	0.013	0.013
3.4.2	0.008	-0.004	-0.003	0.003	0.002	-0.003	-0.015	-0.015	-0.015
3.5.1	-0.002	-0.002	-0.002	-0.005	-0.007	-0.008	-0.008	-0.008	-0.008
3.5.2	-0.005	-0.005	-0.003	-0.004	0.006	-0.009	-0.008	-0.006	-0.006
3.7.1	0.000	0.000	0.000	-0.001	0.004	0.009	0.005	0.006	0.006
3.7.2	0.014	0.024	0.029	0.036	0.043	0.056	0.056	0.056	0.056
3.8.1	0.002	0.000	0.002	-0.002	-0.003	-0.003	0.004	0.006	0.002
3.8.2	0.005	0.006	0.007	0.007	0.002	0.001	0.001	-0.004	-0.004
3.9.1	0.014	0.013	0.013	0.018	0.012	0.034	0.039	0.026	0.029
3.9.2	0.005	0.010	0.005	0.025	0.002	0.028	0.030	0.034	0.037
3.9.3	-0.056	-0.056	-0.056	-0.056	-0.056	-0.056	-0.056	-0.056	-0.056
7.1.1	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333

7.2.1	-0.020	0.024	-0.007	0.010	0.037	0.011	0.000	-0.017	0.040
7.3.1	-0.254	-0.209	-0.099	-0.138	-0.077	-0.059	0.000	0.043	0.124
11.1.1	-0.003	-0.003	-0.006	-0.005	0.002	0.024	0.014	-0.048	-0.057
11.2.1	0.000	0.000	-0.001	-0.002	-0.016	-0.030	-0.041	-0.048	-0.060
11.5.1	-0.125	-0.125	-0.125	-0.125	-0.125	-0.125	-0.125	-0.125	-0.125
11.5.2	-0.125	-0.125	-0.125	-0.125	-0.125	-0.125	0.125	0.125	0.125
11.6.1	0.002	0.004	0.005	0.005	0.006	0.005	0.003	0.004	0.004
11.6.2	0.034	0.038	0.043	0.058	0.079	0.067	0.086	0.023	0.089
11.7.1	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
11.7.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13.2.2	0.015	0.076	0.032	0.061	0.254	0.175	0.096	0.125	0.221

Supplementary Table 6: Decomposed indicator-level contributions to UN Benchmark attainment in Shanghai.

SDG Indicator	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.1.1	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.2.1	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.2.2	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.3.1	0.001	-0.003	-0.002	0.001	0.014	0.009	0.022	0.015	0.020
3.3.2	0.001	0.003	0.004	0.003	0.009	0.011	0.027	0.016	0.019
3.3.3	0.012	-0.026	0.006	0.006	0.026	-0.044	0.010	0.038	0.002
3.3.4	0.001	0.011	0.023	0.039	0.045	0.045	0.046	0.043	0.041
3.4.1	0.000	-0.002	-0.002	-0.007	-0.007	-0.013	-0.044	-0.056	-0.005
3.4.2	0.002	0.000	-0.003	0.006	0.006	0.034	-0.019	0.013	0.056
3.5.1	0.000	0.000	0.001	0.001	0.002	0.002	0.003	0.004	0.004
3.5.2	-0.004	0.022	0.056	0.056	0.056	0.056	0.056	0.056	0.056
3.7.1	0.004	0.027	0.021	0.021	0.021	0.021	0.021	0.021	0.021
3.7.2	0.002	0.007	0.022	0.027	0.043	0.050	0.055	0.056	0.056
3.8.1	0.006	0.009	0.010	0.012	0.015	0.018	0.019	0.020	0.021
3.8.2	-0.015	0.001	0.000	0.007	-0.012	-0.001	-0.014	-0.008	-0.002
3.9.1	0.010	0.019	0.021	0.019	0.023	0.030	0.034	0.027	0.027
3.9.2	0.009	0.012	0.016	0.019	0.034	0.029	0.004	-0.040	0.031
3.9.3	0.006	-0.001	0.002	-0.003	-0.001	-0.014	-0.021	-0.014	-0.009

7.1.1	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
7.2.1	-0.028	-0.023	-0.025	-0.018	-0.004	-0.015	0.000	-0.015	-0.006
7.3.1	-0.333	-0.310	-0.230	-0.193	-0.121	-0.066	0.000	-0.011	-0.009
11.1.1	0.000	0.000	0.001	0.032	0.042	0.051	0.059	0.069	0.067
11.2.1	0.007	0.000	-0.007	0.010	-0.018	-0.017	-0.055	-0.051	-0.051
11.5.1	0.125	0.125	0.012	0.125	0.125	0.125	0.125	0.125	0.125
11.5.2	-0.125	0.125	-0.125	0.125	0.125	0.125	0.125	0.125	0.125
11.6.1	0.000	-0.011	-0.009	0.003	0.012	0.019	0.020	0.031	0.031
11.6.2	0.021	0.036	0.044	0.047	0.055	0.068	0.073	0.065	0.065
11.7.1	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
11.7.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13.2.2	0.010	-0.001	0.052	0.034	0.148	0.030	0.161	0.030	0.030

Supplementary Table 7: Decomposed indicator-level contributions to London Benchmark attainment in London.

SDG Indicator	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.3.1	0.110	0.178	0.204	0.222	0.255	0.276	0.228	0.241	0.255
3.4.2	0.105	0.113	0.052	0.083	0.132	0.147	0.136	0.114	0.060
7.2.1	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.003	0.132
11.1.1	0.002	0.006	0.002	-0.003	-0.012	0.003	0.001	-0.019	-0.053
11.6.1	-0.005	-0.001	-0.001	0.000	-0.002	-0.003	-0.006	-0.009	-0.010
11.6.2	-0.075	-0.019	0.094	0.086	0.250	0.250	0.250	0.250	0.250
11.7.1	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250
13.2.1	0.030	0.056	0.064	0.086	0.129	0.103	0.133	0.159	0.159
13.2.2	0.030	0.056	0.064	0.086	0.129	0.103	0.133	0.159	0.159

Supplementary Table 8: Decomposed indicator-level contributions to New York City Benchmark attainment in New York City.

SDG Indicator	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.1.1	-0.054	-0.167	-0.167	-0.167	-0.167	-0.167	-0.167	-0.167	-0.167
3.3.1	0.017	0.038	0.053	0.073	0.123	0.099	0.100	0.086	0.074
3.3.2	0.006	-0.010	0.006	0.005	0.039	0.014	0.012	-0.032	-0.078
3.3.4	-0.053	0.044	0.018	0.035	0.009	0.035	0.053	0.061	0.061

3.4.1	0.024	0.005	-0.091	-0.044	-0.070	0.139	0.125	0.125	0.125
3.4.2	0.082	-0.039	-0.030	0.033	0.015	-0.033	-0.151	-0.151	-0.151
7.2.1	-0.006	0.100	0.050	0.078	0.055	0.045	0.056	0.079	0.126
11.1.1	-0.006	-0.006	-0.012	-0.010	0.004	0.048	0.029	-0.096	-0.115
11.2.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11.6.1	-0.001	0.006	-0.006	-0.006	-0.001	-0.021	0.028	0.041	0.038
11.6.2	0.174	0.174	0.233	0.250	0.250	0.250	0.250	0.250	0.250
13.2.1	0.024	0.122	0.052	0.099	0.409	0.282	0.155	0.202	0.356
13.2.2	0.024	0.122	0.052	0.099	0.409	0.282	0.155	0.202	0.356

Supplementary Table 9: Decomposed indicator-level contributions to Shanghai Benchmark attainment in Shanghai.

SDG Indicator	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.1.1	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
3.2.1	0.057	0.061	0.074	0.106	0.125	0.125	0.125	0.125	0.125
3.2.2	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
3.3.1	0.002	-0.011	-0.005	0.004	0.045	0.027	0.068	0.047	0.061
3.3.2	0.007	0.015	0.022	0.015	0.047	0.057	0.125	0.086	0.098
3.3.3	0.027	-0.057	0.014	0.014	0.059	-0.100	0.023	0.085	0.006
3.4.1	0.007	0.008	0.012	0.016	0.018	0.011	-0.023	-0.078	0.021
3.8.2	-0.125	0.014	0.005	0.106	-0.125	-0.023	-0.125	-0.123	-0.039
7.2.1	0.029	0.039	0.034	0.048	0.074	0.054	0.081	0.053	0.070
11.6.1	0.000	0.000	0.087	0.174	0.196	0.217	0.239	0.261	0.283
11.6.2	0.100	0.175	0.213	0.225	0.263	0.325	0.333	0.313	0.313
11.7.1	0.022	0.061	0.092	0.127	0.149	0.170	0.199	0.217	0.243
13.2.1	0.187	0.338	0.500	0.500	0.500	0.500	0.500	0.500	0.500
13.2.2	0.187	0.338	0.500	0.500	0.500	0.500	0.500	0.500	0.500

Supplementary Table 10: Decomposed indicator-level contributions to UK Benchmark attainment in London.

SDG Indicator	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.1.1	0.020	0.020	-0.020	0.000	0.040	0.000	0.099	0.060	0.000
3.2.1	-0.001	-0.003	0.015	0.005	0.015	0.019	0.021	0.023	0.029

3.2.2	0.000	-0.009	0.012	-0.003	0.002	0.012	0.020	0.016	0.021
3.3.1	0.024	0.040	0.045	0.049	0.057	0.061	0.051	0.053	0.057
3.3.2	0.000	0.000	0.000	0.011	0.025	0.024	0.025	0.019	0.007
3.3.4	0.000	0.019	0.028	0.049	0.060	0.079	0.073	0.073	0.073
3.4.1	0.032	0.017	0.020	0.021	0.005	-0.019	-0.013	-0.010	0.003
3.4.2	0.073	0.079	0.041	0.062	0.094	0.102	0.097	0.086	0.053
3.5.2	-0.010	-0.014	-0.019	-0.014	-0.014	-0.029	-0.029	-0.029	-0.029
7.2.1	0.183	0.266	0.332	0.567	0.372	0.645	0.634	0.692	0.730
11.1.1	0.005	0.011	0.004	-0.006	-0.024	0.006	0.002	-0.039	-0.106
11.6.1	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250
11.6.2	-0.075	-0.019	0.094	0.086	0.250	0.250	0.250	0.250	0.250
11.7.2	0.000	0.000	0.000	0.000	0.000	0.000	0.069	0.069	0.069
13.2.2	0.116	0.218	0.248	0.334	0.498	0.399	0.515	0.614	0.614

Supplementary Table 11: Decomposed indicator-level contributions to American Benchmark attainment in New York City.

SDG Indicator	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.1.1	0.125	0.071	0.083	0.094	0.094	0.063	0.054	0.054	0.054
3.2.1	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
3.3.1	0.008	0.017	0.024	0.033	0.055	0.044	0.045	0.039	0.033
3.3.2	0.006	-0.007	0.006	0.004	0.035	0.018	0.014	-0.028	-0.063
3.3.4	-0.011	0.008	0.025	0.028	0.059	0.040	0.036	0.012	-0.002
3.4.1	-0.006	0.002	-0.004	0.006	0.025	0.036	0.035	0.034	0.034
3.4.2	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
3.8.1	0.005	-0.001	0.004	-0.010	-0.010	-0.011	0.009	0.012	0.002
7.2.1	-0.006	0.100	0.016	0.025	-0.061	-0.149	-0.196	-0.230	-0.229
11.5.1	-0.250	-0.250	-0.250	-0.250	-0.250	-0.250	-0.250	-0.250	-0.250
11.5.2	-0.250	-0.250	-0.250	-0.250	-0.250	-0.250	0.250	0.236	0.250
11.6.1	0.009	0.021	0.024	0.026	0.030	0.023	0.014	0.019	0.022
11.6.2	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250
13.1.1	-0.500	-0.500	-0.500	-0.500	-0.500	-0.500	-0.500	-0.500	-0.500
13.2.2	0.011	0.056	0.024	0.045	0.186	0.128	0.071	0.092	0.162

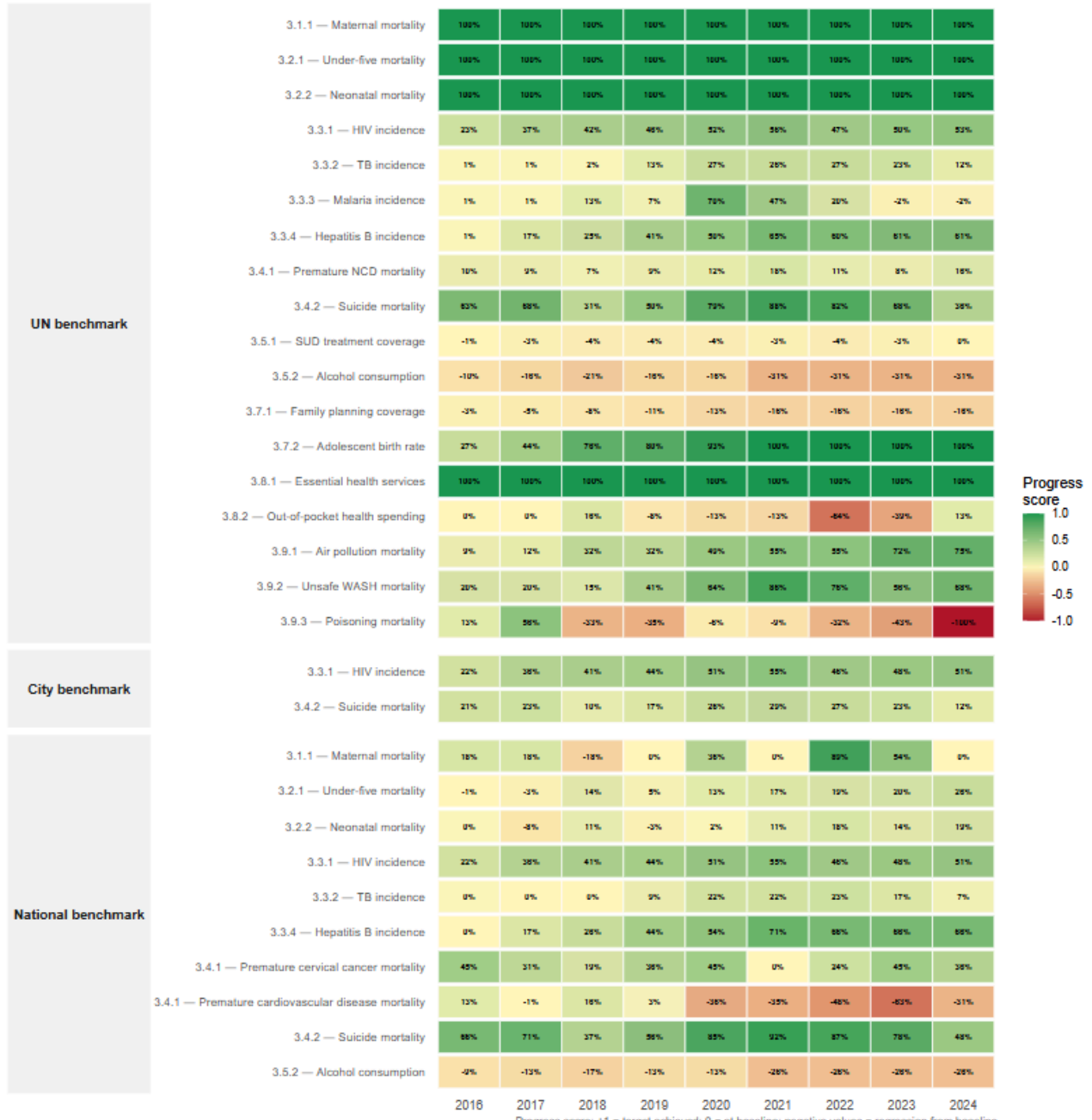
Supplementary Table 12: Decomposed indicator-level contributions to Chinese Benchmark attainment in Shanghai.

SDG Indicator	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.1.1	0.143	0.143	0.143	0.143	0.143	0.143	0.143	0.143	0.143
3.2.1	0.143	0.143	0.143	0.143	0.143	0.143	0.143	0.143	0.143
3.2.2	0.143	0.143	0.143	0.143	0.143	0.143	0.143	0.143	0.143
3.3.2	0.143	0.143	0.143	0.143	0.143	0.143	0.143	0.143	0.143
3.3.3	0.031	-0.066	0.016	0.016	0.067	-0.114	0.026	0.097	0.006
3.4.1	0.078	0.081	0.083	0.086	0.096	0.092	0.075	-0.099	0.094
3.8.2	0.143	0.143	0.143	0.143	0.143	0.143	0.143	0.143	0.143
7.1.1	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
7.2.1	0.010	0.013	0.011	0.016	0.025	0.018	0.027	0.018	0.023
7.3.1	0.053	0.111	0.158	0.173	0.218	0.250	0.286	0.278	0.280
11.5.1	0.200	0.200	-0.200	0.200	0.200	0.200	0.200	0.200	0.200
11.5.2	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200
11.6.1	0.000	0.056	0.070	0.171	0.200	0.200	0.200	0.200	0.200
11.6.2	0.062	0.108	0.131	0.138	0.162	0.200	0.200	0.192	0.192
11.7.1	0.006	0.015	0.023	0.032	0.038	0.043	0.051	0.055	0.062
13.1.1	0.250	0.250	-0.250	0.250	0.250	0.250	0.250	0.250	0.250
13.2.2	0.331	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500
13.1.1	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250

Supplementary Figures

London — SDG 3 indicator level progress

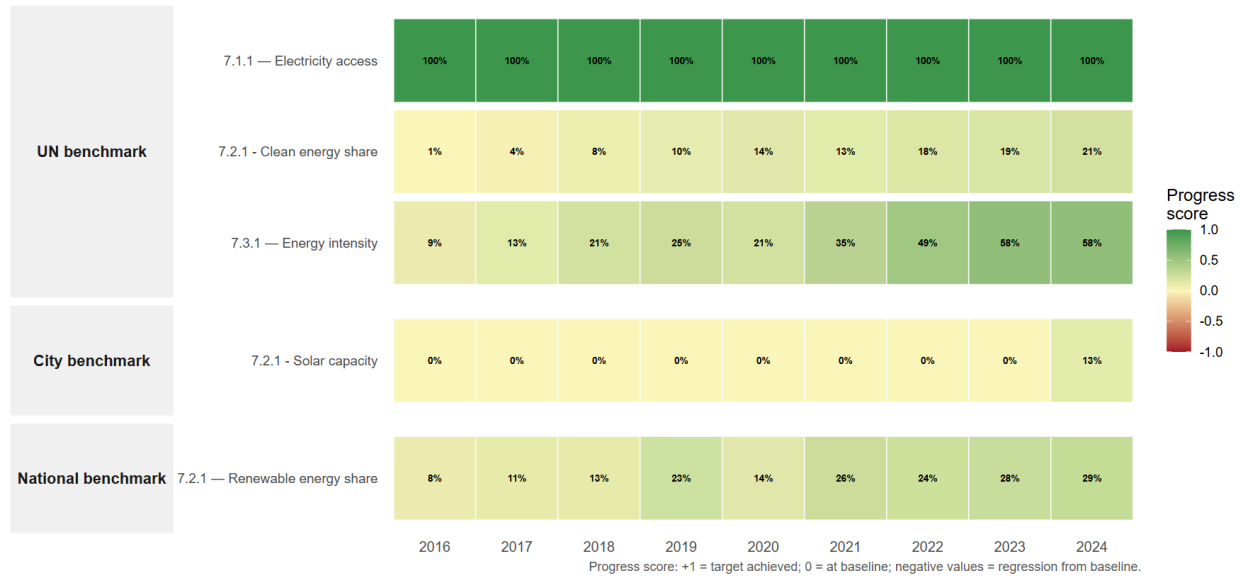
Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 1: London’s indicator-level and governance-level contributions to Benchmarks under SDG 3: Health & Well-being.

London — SDG 7 indicator level progress

Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 2: London’s indicator-level and governance-level contributions to Benchmarks under SDG 7: Clean Energy.

London — SDG 11 indicator level progress

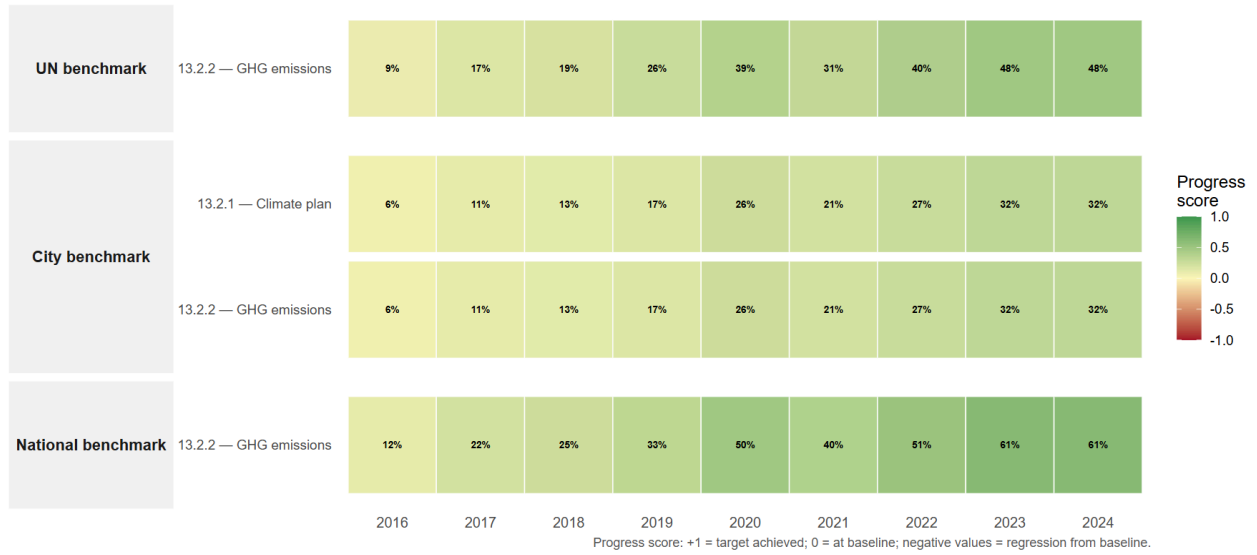
Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 3: London’s indicator-level and governance-level contributions to Benchmarks under SDG 11: Cities.

London — SDG 13 indicator level progress

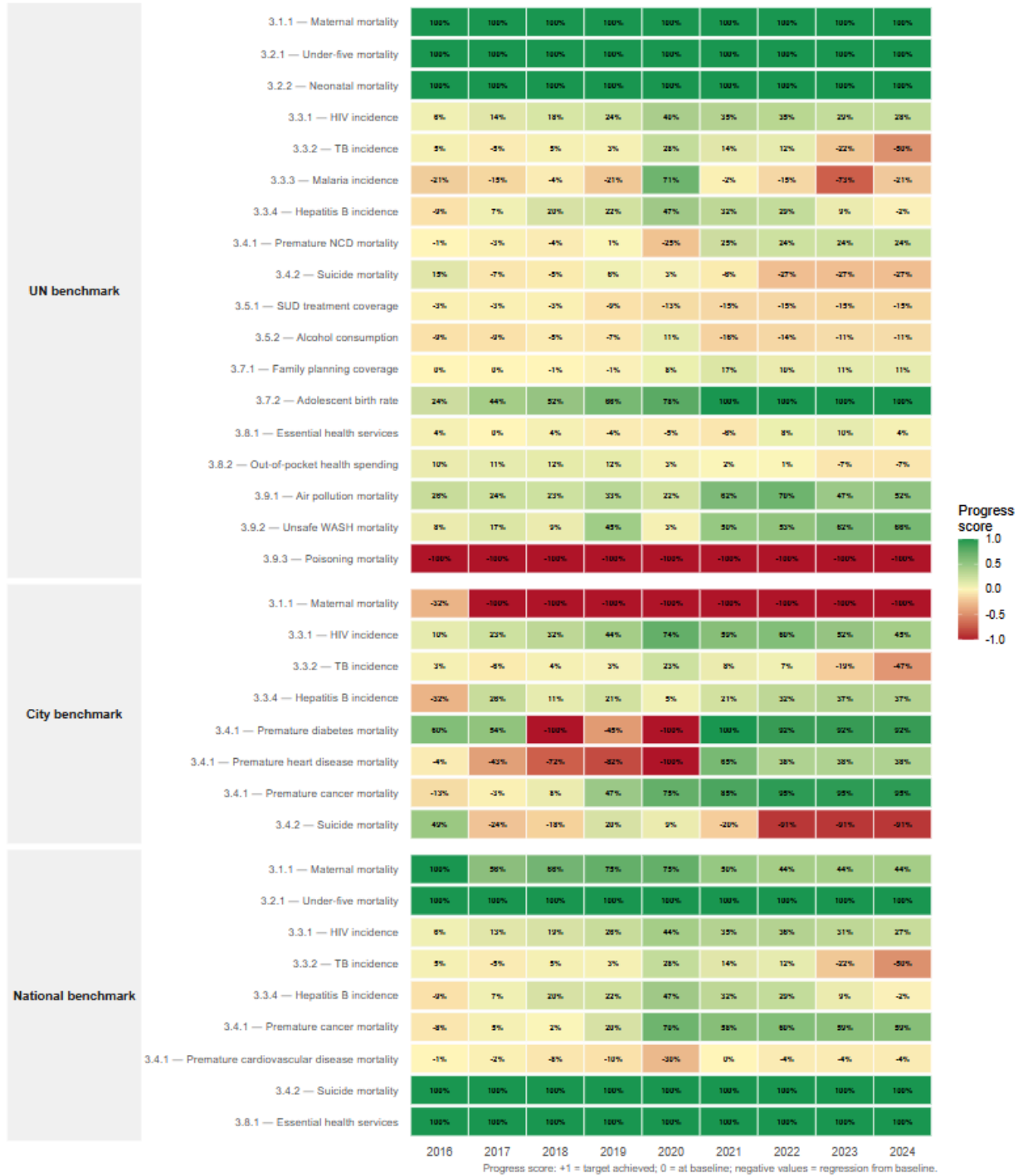
Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 4: London’s indicator-level and governance-level contributions to Benchmarks under SDG 13: Climate Action.

NYC — SDG 3 indicator level progress

Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 5: New York City’s indicator-level and governance-level contributions to Benchmarks under SDG 3: Health & Well-being.

NYC — SDG 7 indicator level progress

Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 6: New York City's indicator-level and governance-level contributions to Benchmarks under SDG 7: Clean Energy.

NYC — SDG 11 indicator level progress

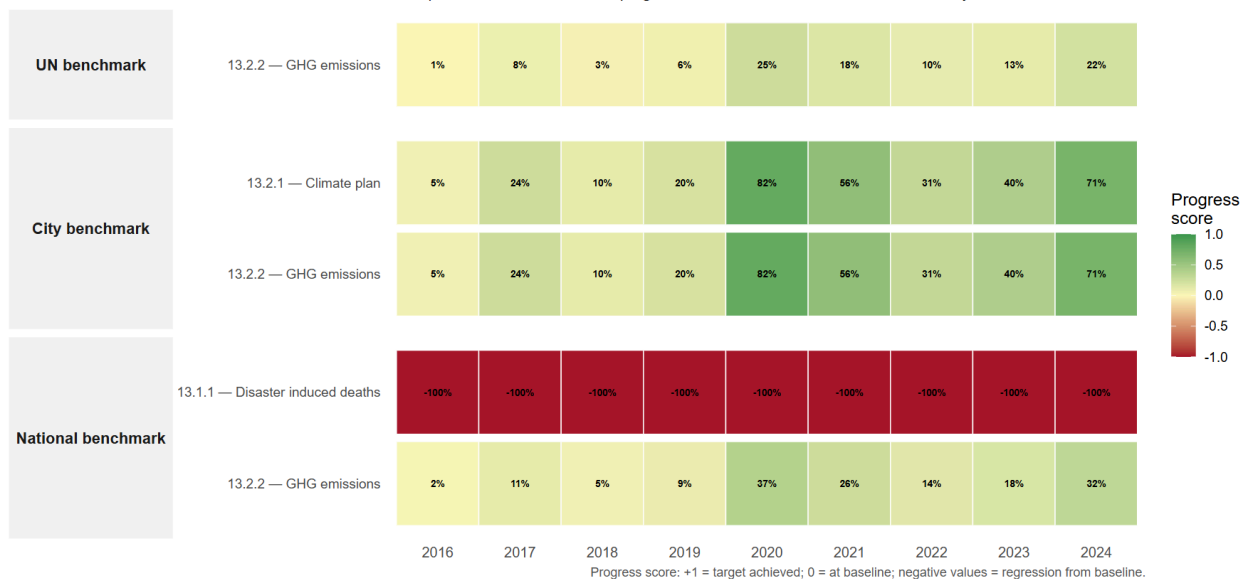
Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 7: New York City’s indicator-level and governance-level contributions to Benchmarks under SDG 11: Cities.

NYC — SDG 13 indicator level progress

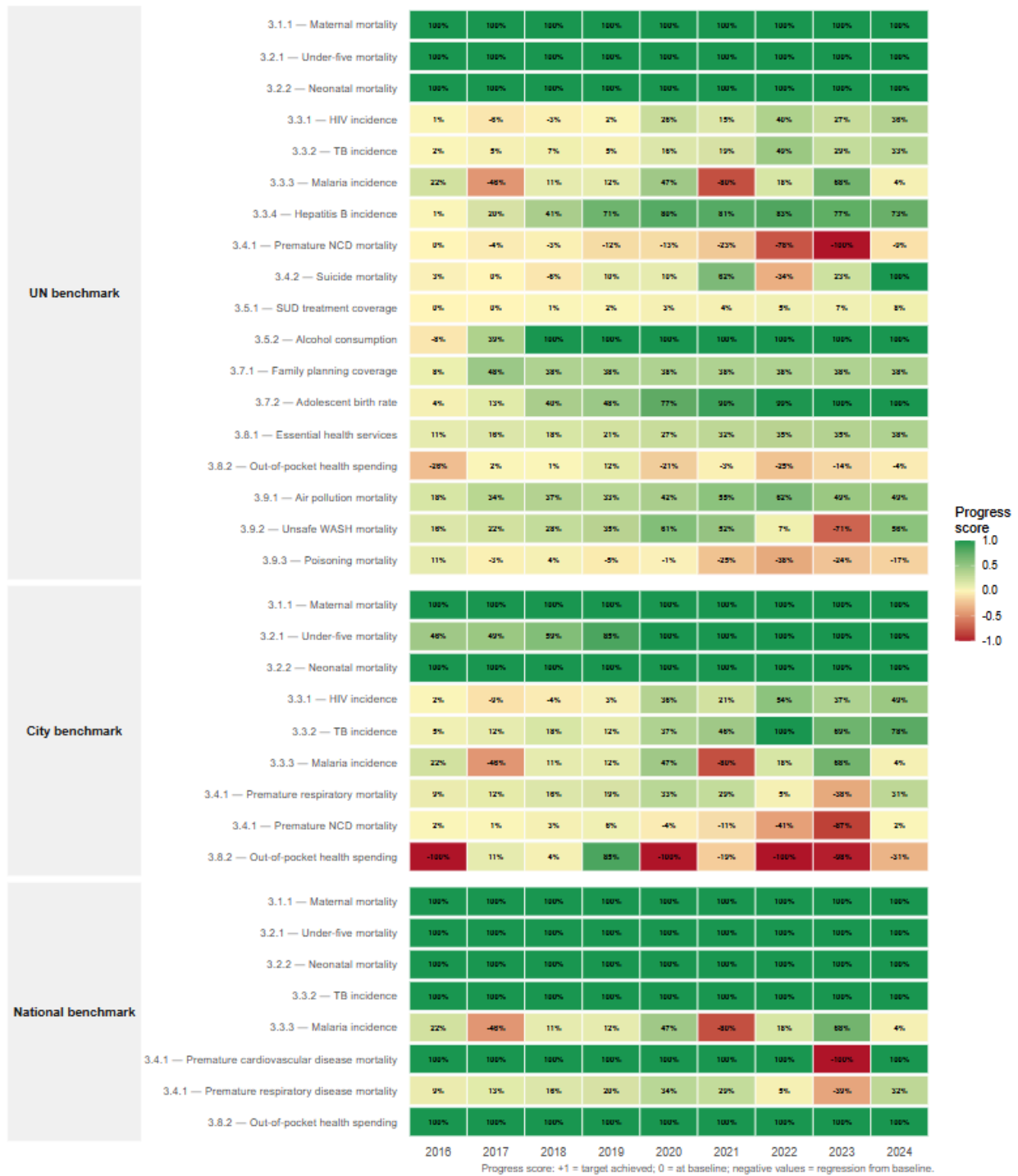
Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 8: New York City’s indicator-level and governance-level contributions to Benchmarks under SDG 13: Climate Action.

Shanghai — SDG 3 indicator level progress

Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 9: Shanghai’s indicator-level and governance-level contributions to Benchmarks under SDG 3: Health & Well-being.

Shanghai — SDG 7 indicator level progress

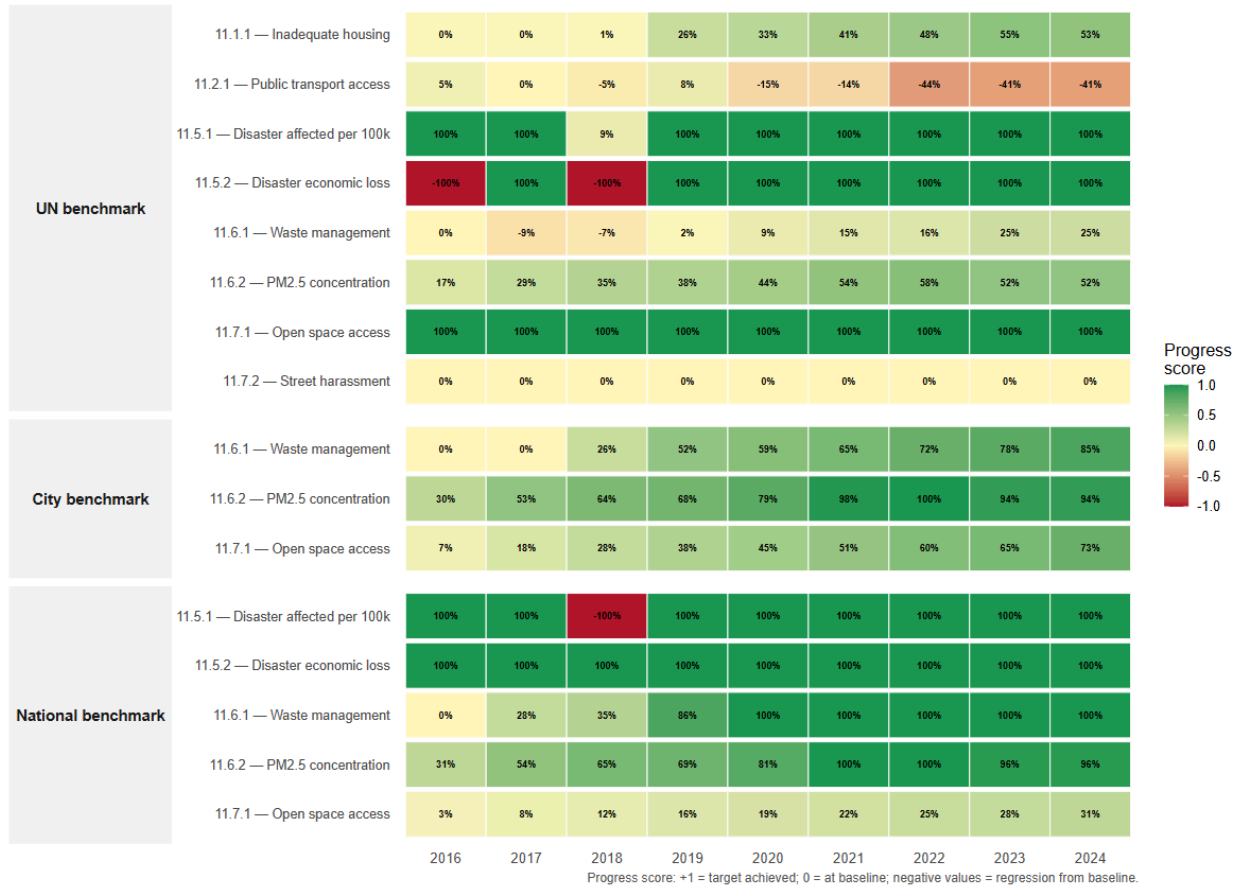
Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 10: Shanghai’s indicator-level and governance-level contributions to Benchmarks under SDG 7: Clean Energy.

Shanghai — SDG 11 indicator level progress

Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 11: Shanghai’s indicator-level and governance-level contributions to Benchmarks under SDG 11: Cities.

Shanghai — SDG 13 indicator level progress

Each panel shows indicator level progress over time under a different benchmark system.



Supplementary Figure 12: Shanghai’s indicator-level and governance-level contributions to Benchmarks under SDG 13: Climate Action.



SDG 3 — Indicator Contributions to SDG Score

Stacks above/below 0 = progress/regression. Black diamond = net SDG score.



Supplementary Figure 13: Decomposed indicator-level contributions to City Benchmarks under SDG 3: Health & Well-being.



SDG 7 – Indicator Contributions to SDG Score

Stacks above/below 0 = progress/regression. Black diamond = net SDG score.

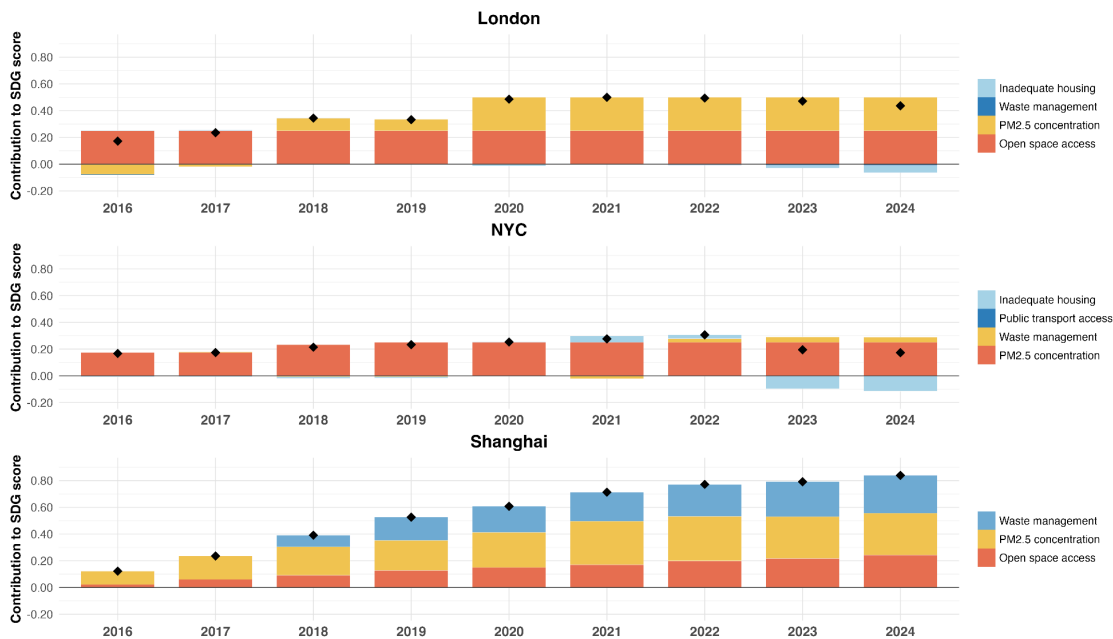


Supplementary Figure 14: Decomposed indicator-level contributions to City Benchmarks under SDG 7: Clean Energy.



SDG 11 – Indicator Contributions to SDG Score

Stacks above/below 0 = progress/regression. Black diamond = net SDG score.



Supplementary Figure 15: Decomposed indicator-level contributions to City Benchmarks under SDG 11: Cities.



SDG 13 — Indicator Contributions to SDG Score

Stacks above/below 0 = progress/regression. Black diamond = net SDG score.



Supplementary Figure 16: Decomposed indicator-level contributions to City Benchmarks under SDG 13: Climate Action.



SDG 3 — Indicator Contributions to SDG Score

Stacks above/below 0 = progress/regression. Black diamond = net SDG score.



Supplementary Figure 17: Decomposed indicator-level contributions to National Benchmarks under SDG 3: Health & Well-being.



SDG 7 — Indicator Contributions to SDG Score

Stacks above/below 0 = progress/regression. Black diamond = net SDG score.



Supplementary Figure 18: Decomposed indicator-level contributions to National Benchmarks under SDG 7: Clean Energy.



SDG 11 — Indicator Contributions to SDG Score

Stacks above/below 0 = progress/regression. Black diamond = net SDG score.



Supplementary Figure 19: Decomposed indicator-level contributions to National Benchmarks under SDG 11: Cities.

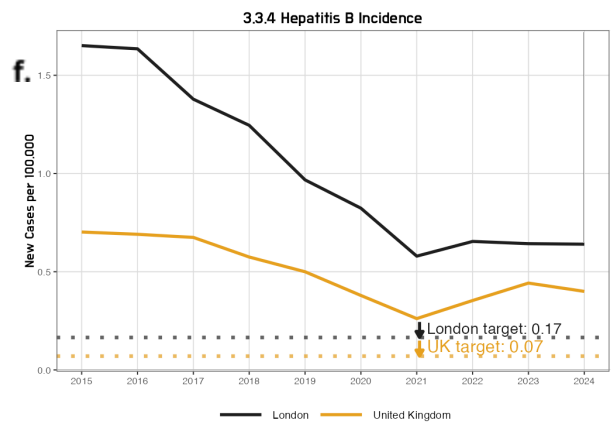
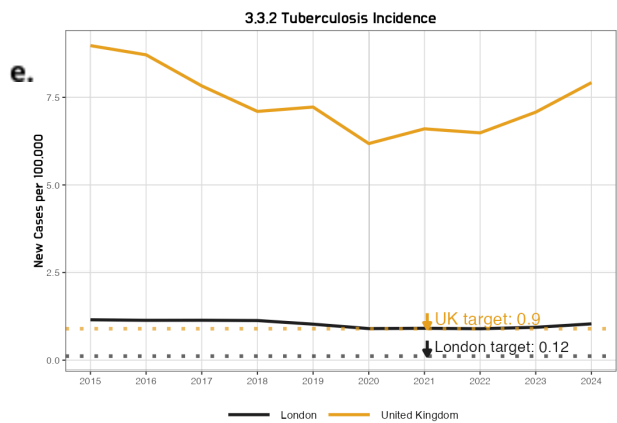
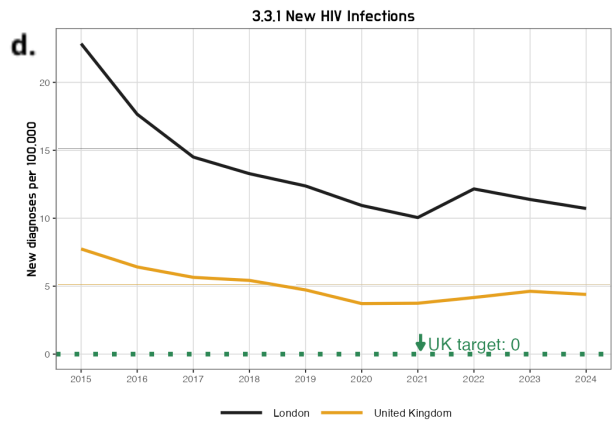
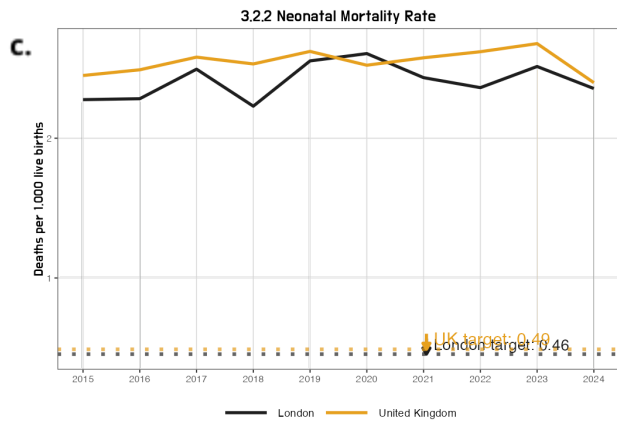
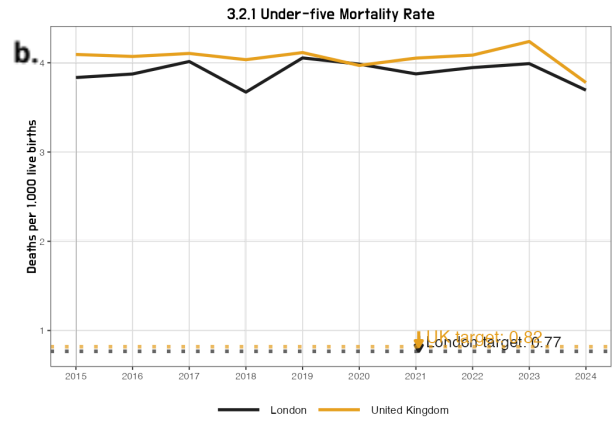
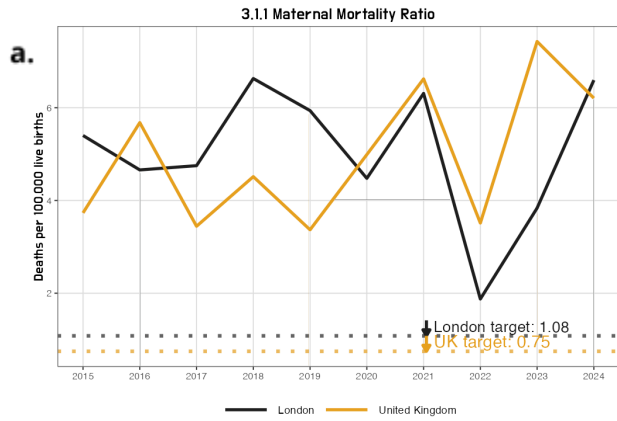


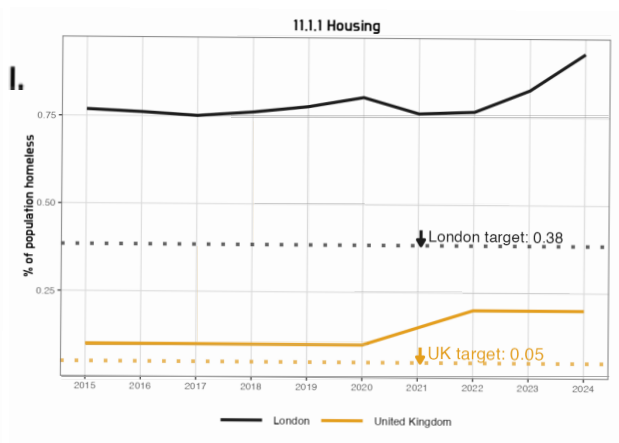
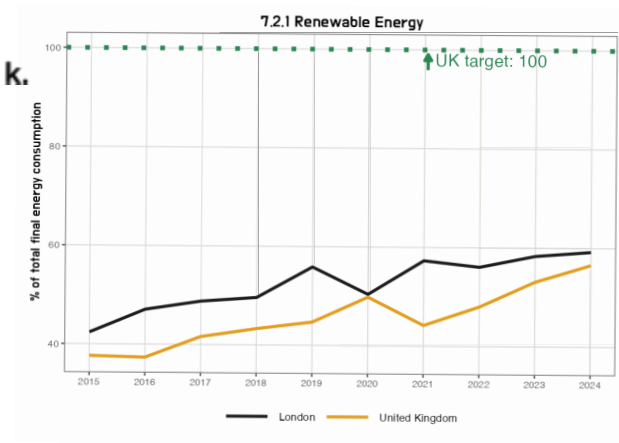
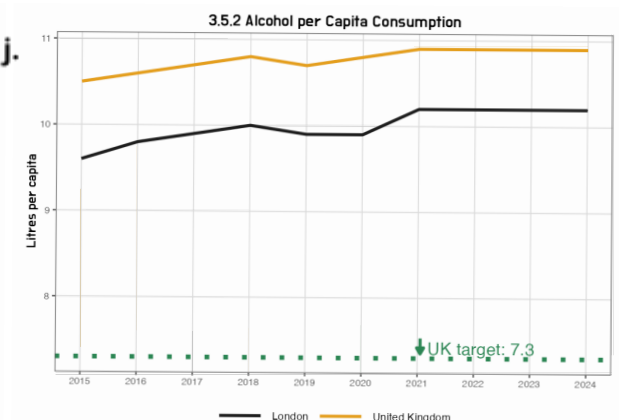
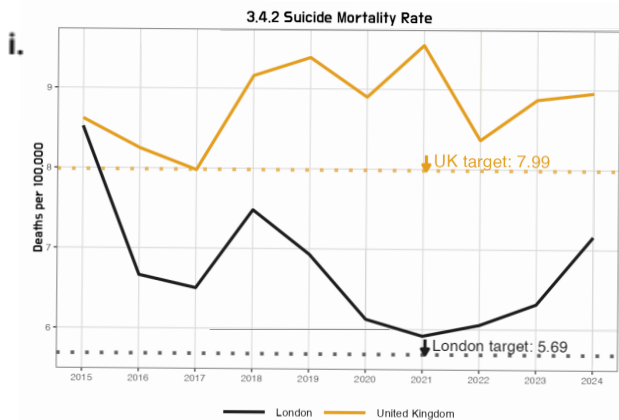
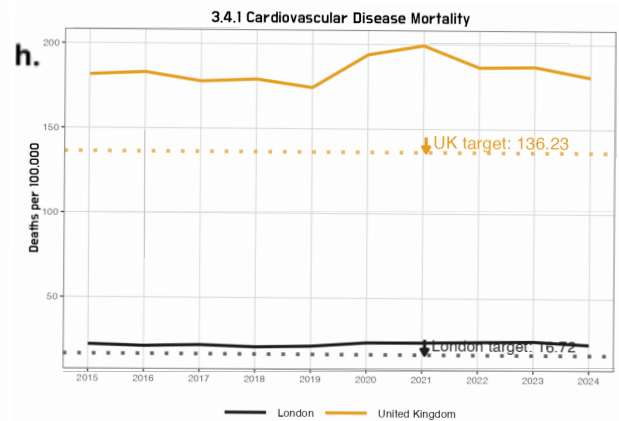
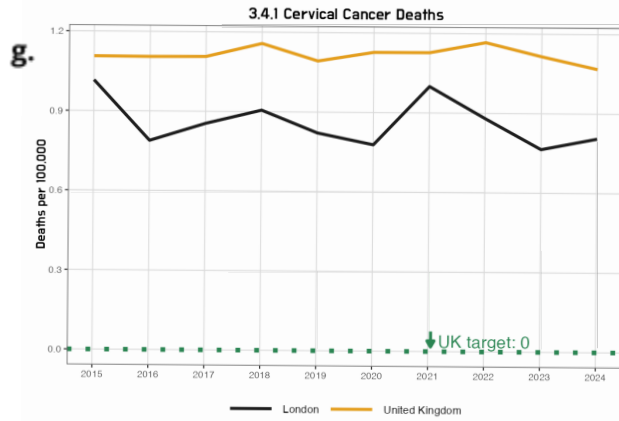
SDG 13 – Indicator Contributions to SDG Score

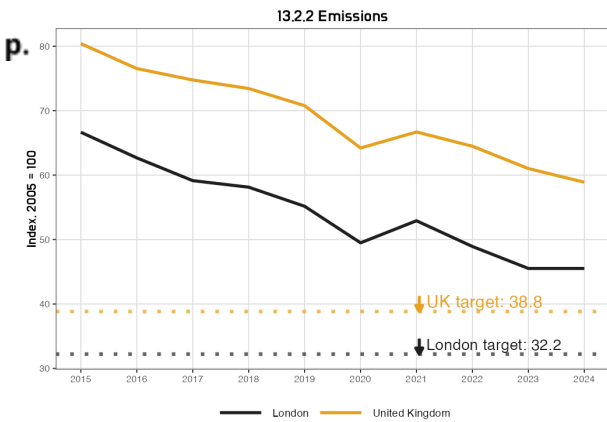
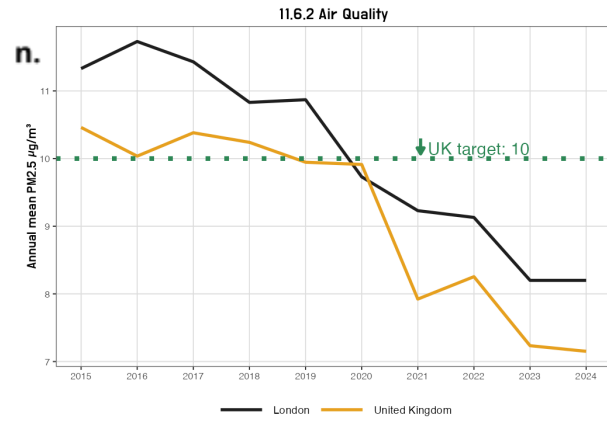
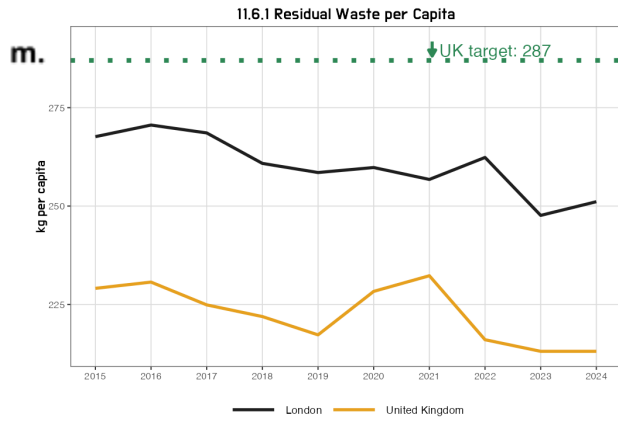
Stacks above/below 0 = progress/regression. Black diamond = net SDG score.



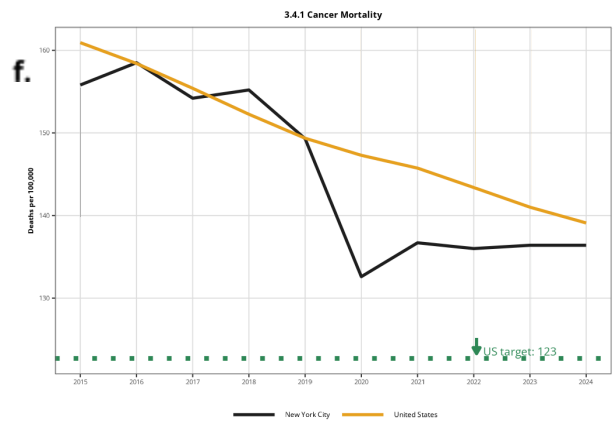
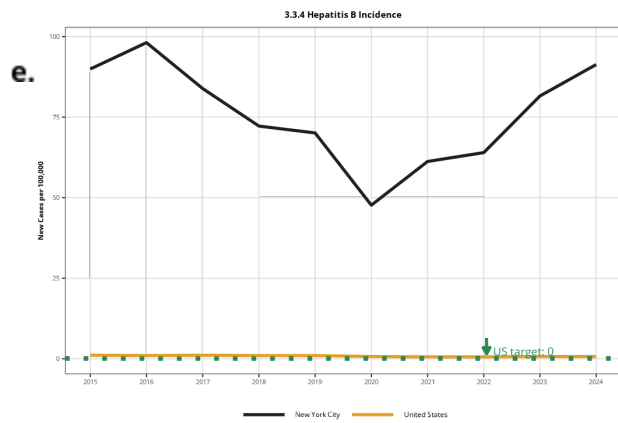
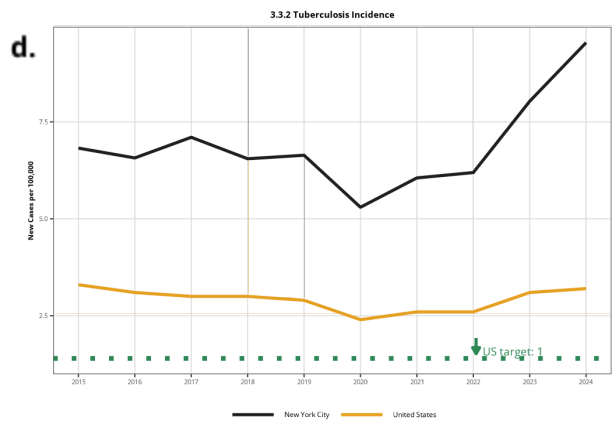
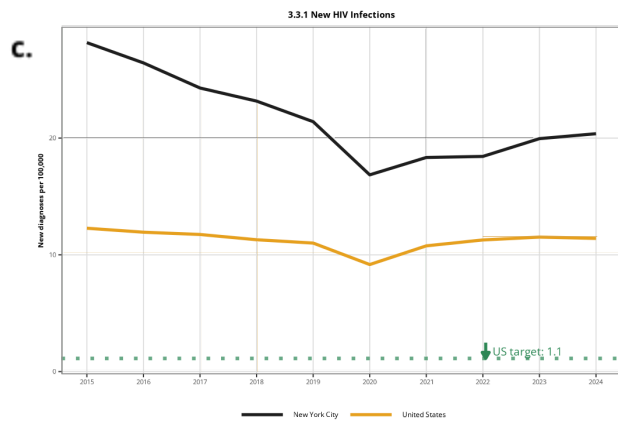
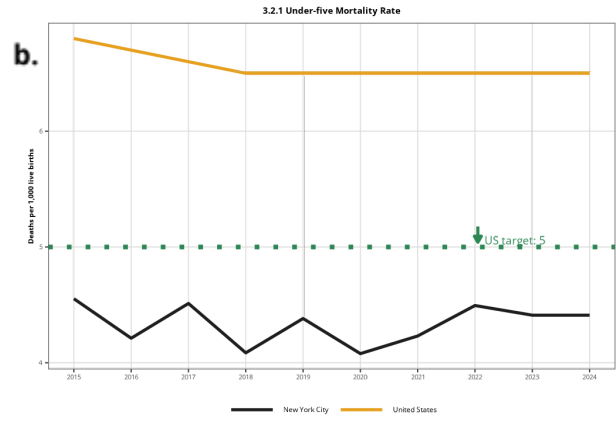
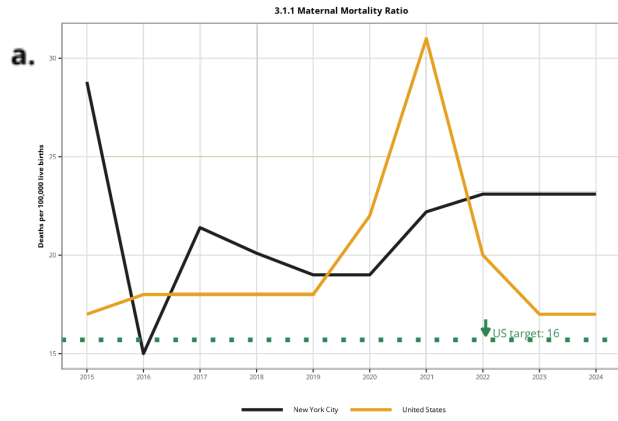
Supplementary Figure 20: Decomposed indicator-level contributions to National Benchmarks under SDG 13: Climate Action.

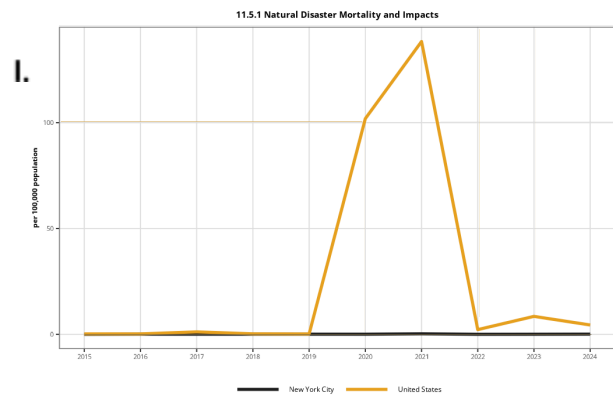
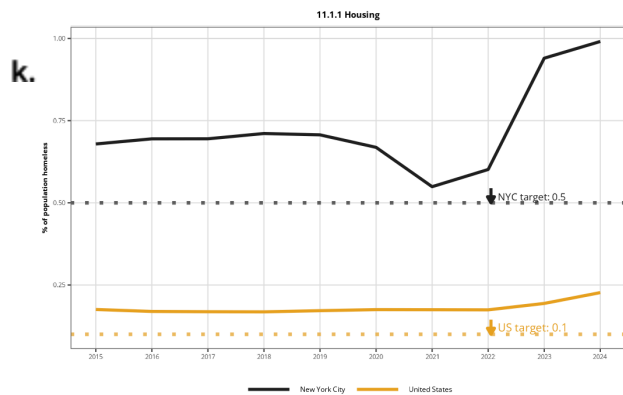
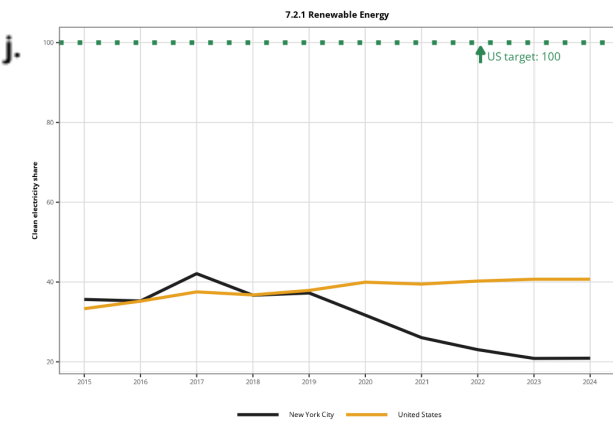
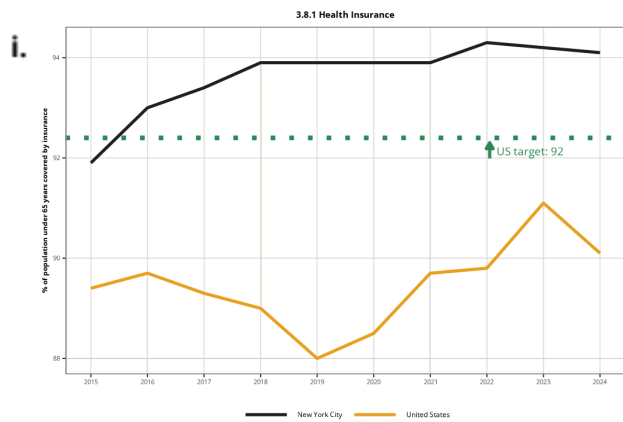
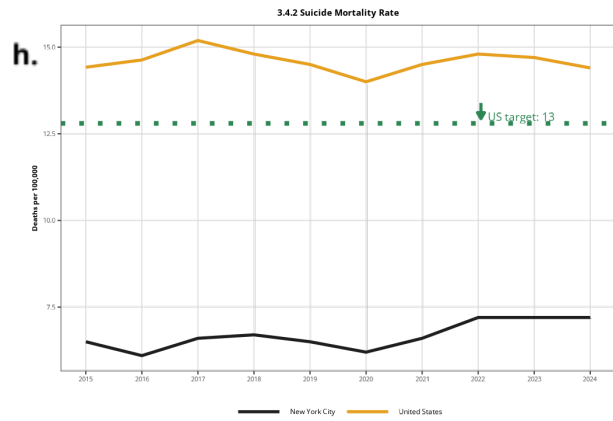
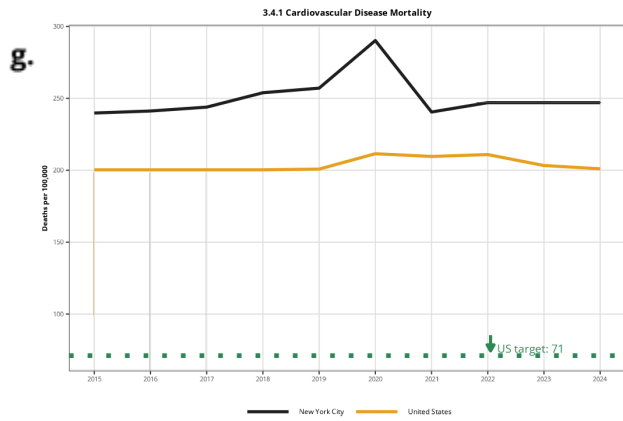






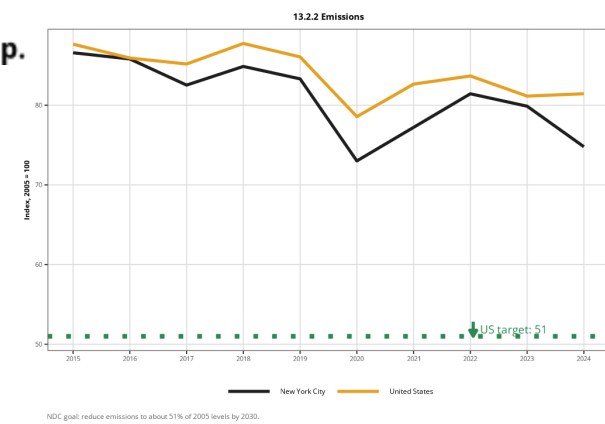
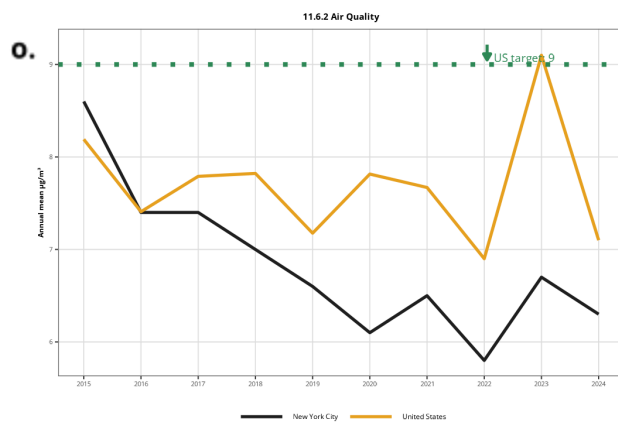
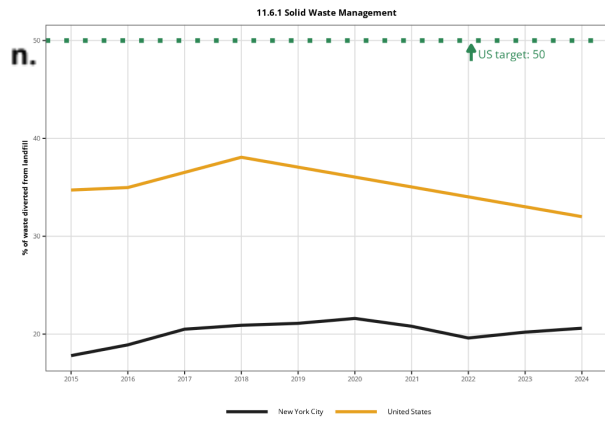
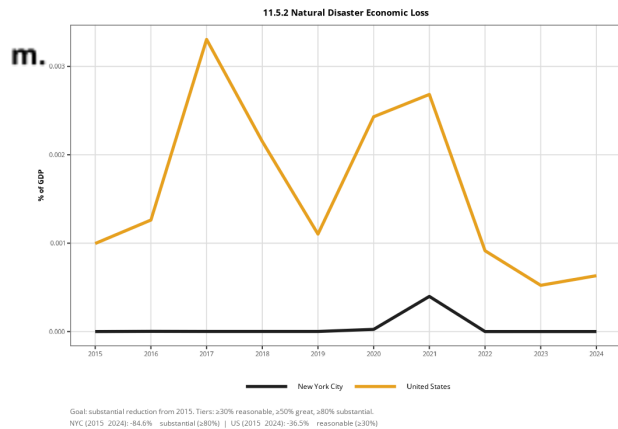
Supplementary Figure 21: Comparing city-level and national-level performance on UK 2030 benchmarks. a. 3.1.1 Maternal mortality rate b. 3.2.1 Under-five Mortality Rate c. 3.2.2 Neonatal Mortality Rate d. 3.3.1 HIV Prevalence e. 3.3.2 TB Incidence f. 3.3.4 HBV Incidence g. 3.4.1 Cervical Cancer Deaths h. 3.4.1 Cardiovascular Disease Mortality i. 3.4.2 Suicide Mortality Rate j. 3.5.2 Alcohol per Capita Consumption k. 7.2.1 Renewable Energy l. 11.1.1 Homelessness m. 11.6.1 Solid Waste Management n. 11.6.2 Air Quality o. 11.7.2 Street Harassment p. 13.2.2 Emissions



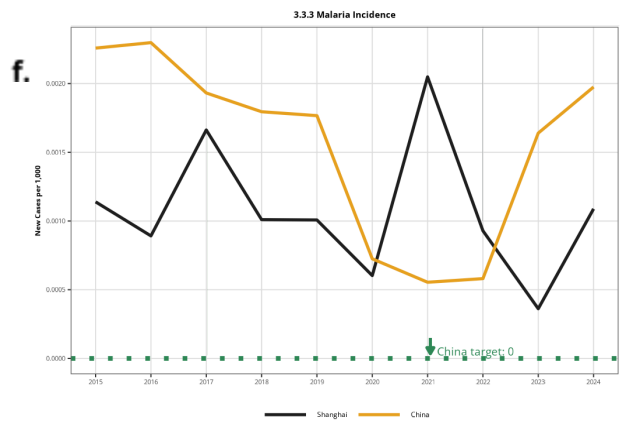
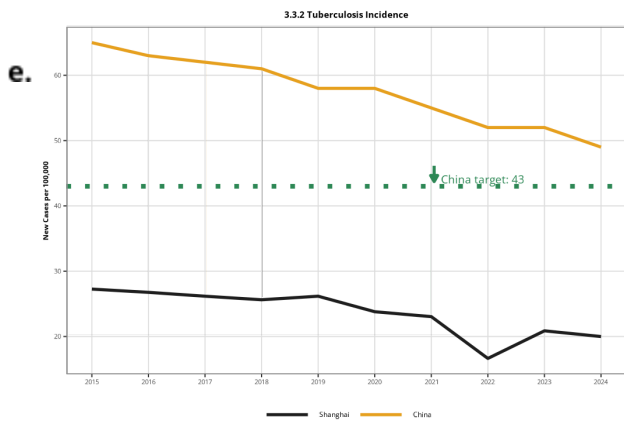
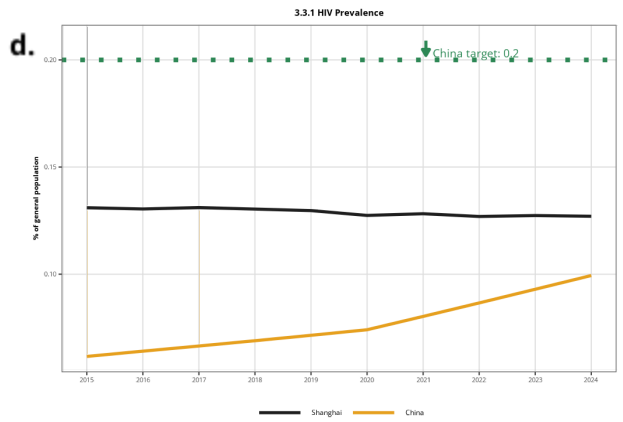
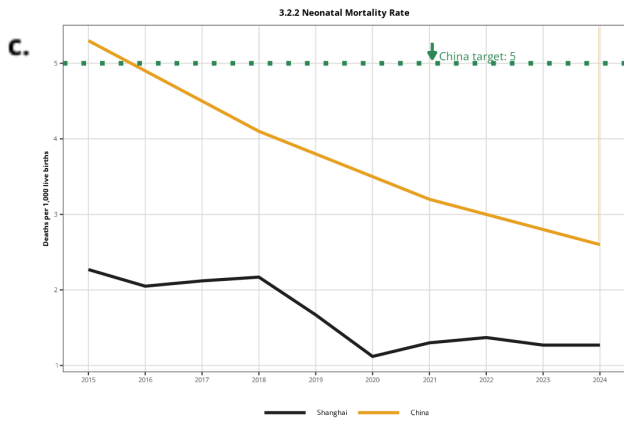
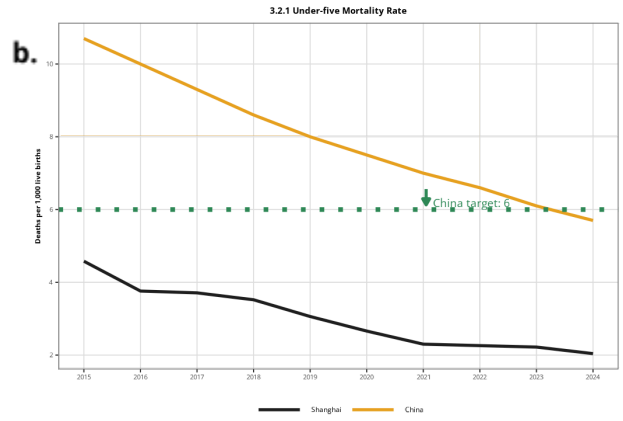
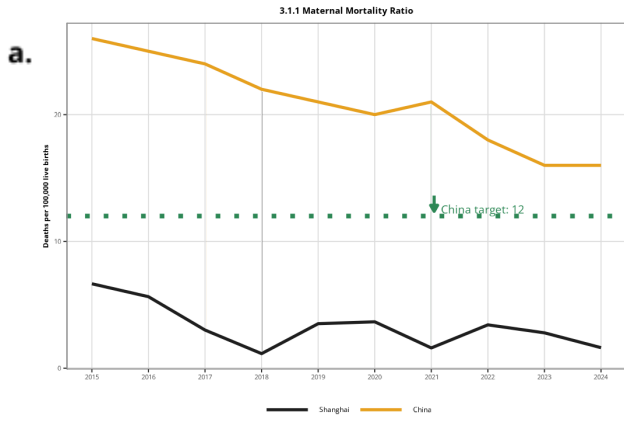


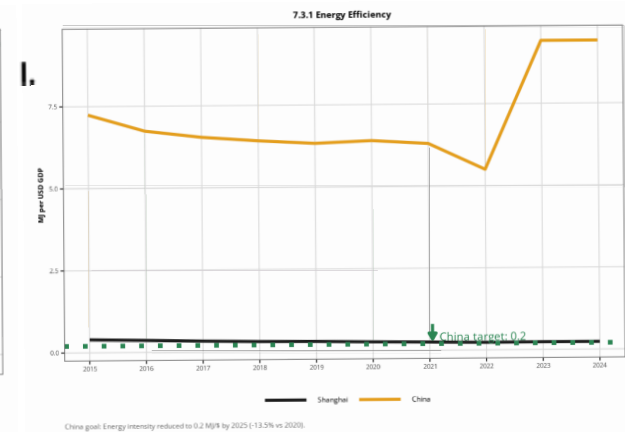
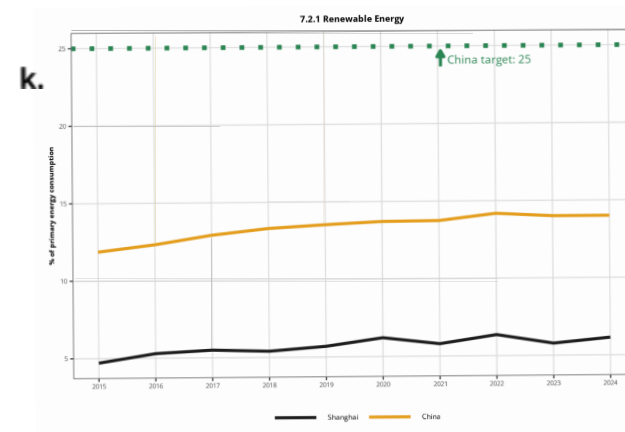
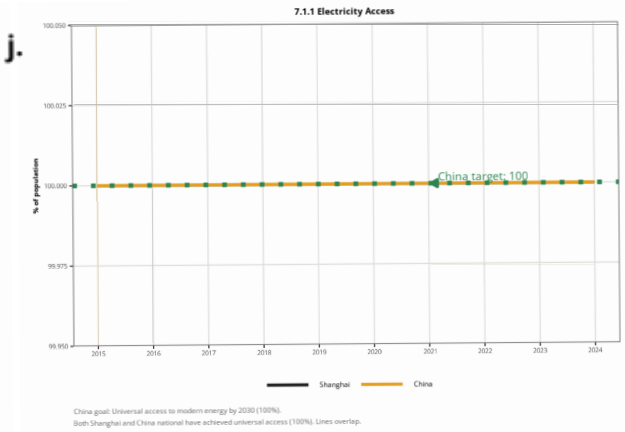
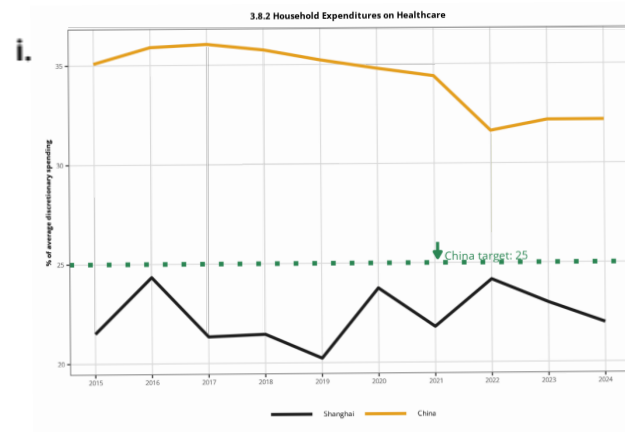
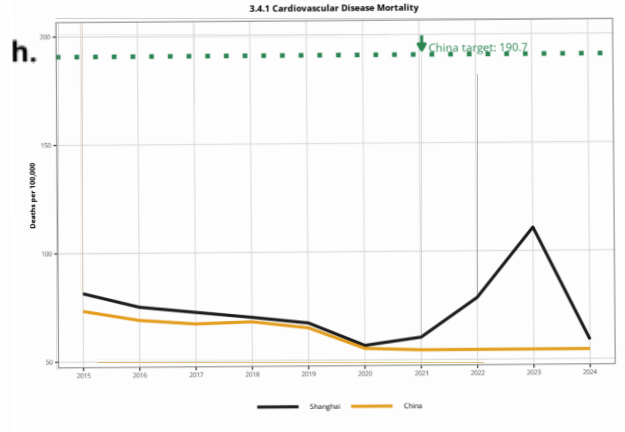
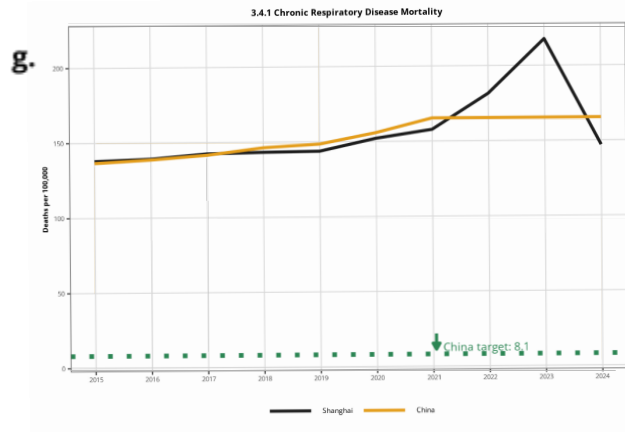
Goal: each geography reduces homelessness by 25% from its own 2022 level by 2025.
 NYC target: 2022: 2024: +64.7% NOT MET | US target: 2022: 2024: +30.1% NOT MET

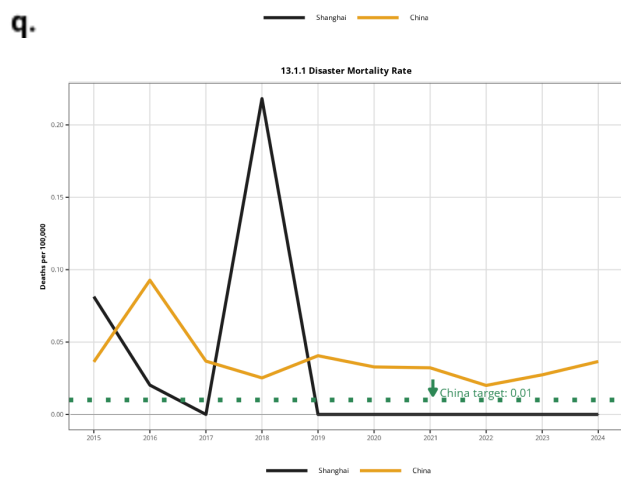
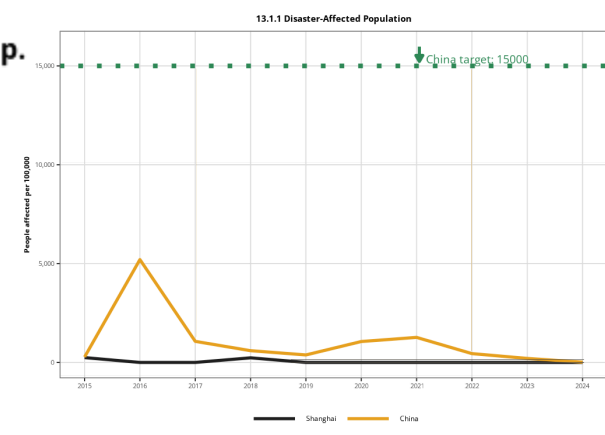
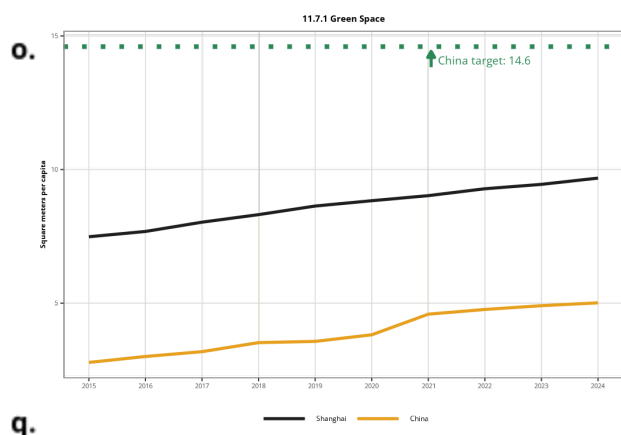
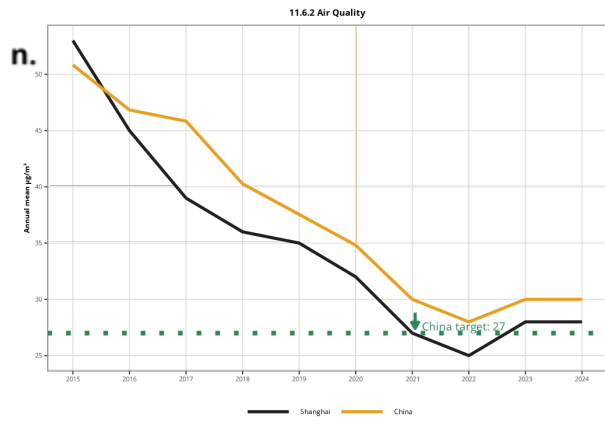
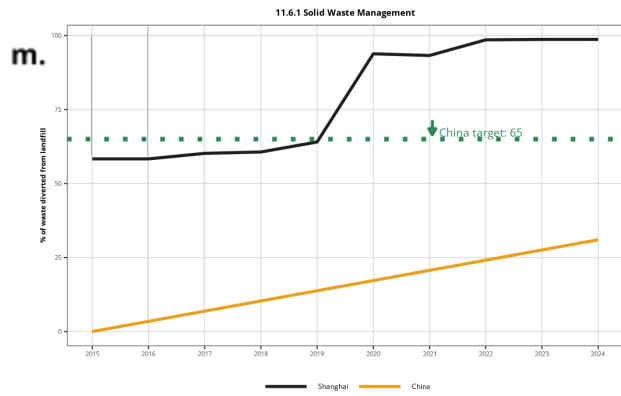
Goal: substantial reduction from 2015. Tier: 30% reasonable, 50% great, 80% substantial.
 NYC (2015-2024): +666.8% NOT MET | US (2015-2024): +2000.2% NOT MET



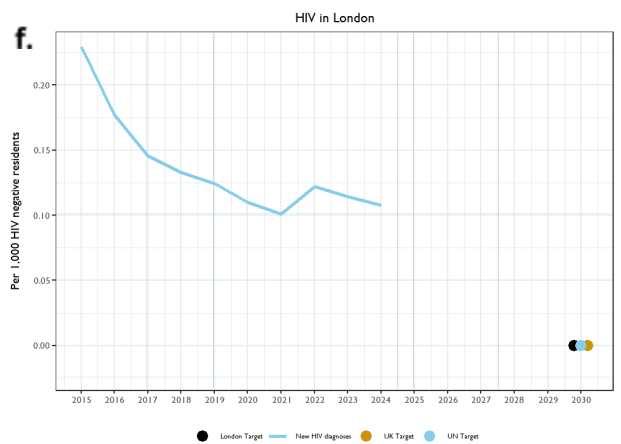
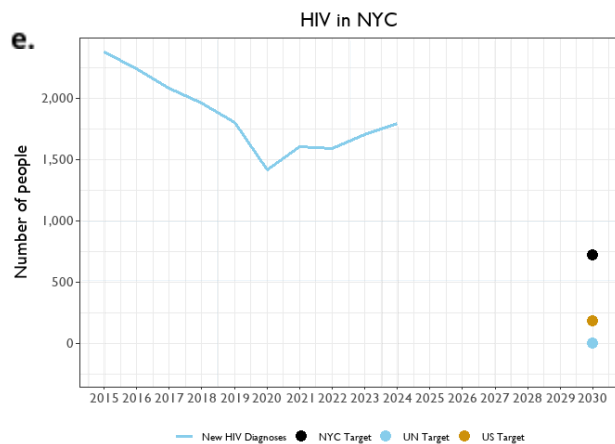
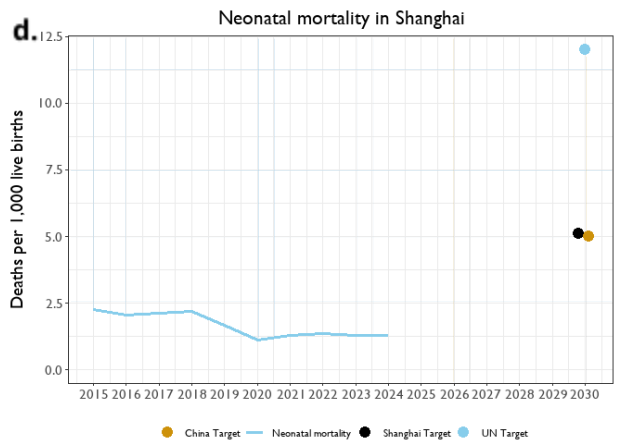
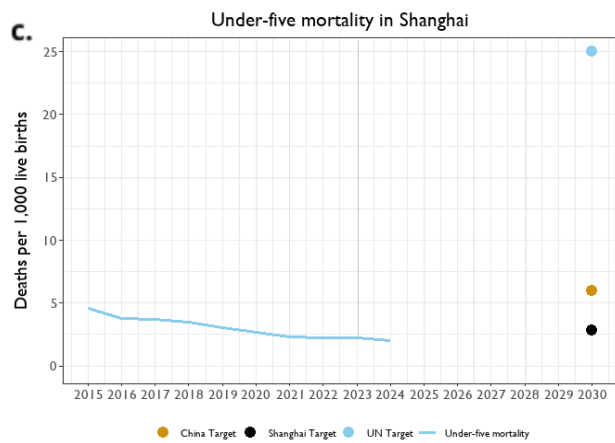
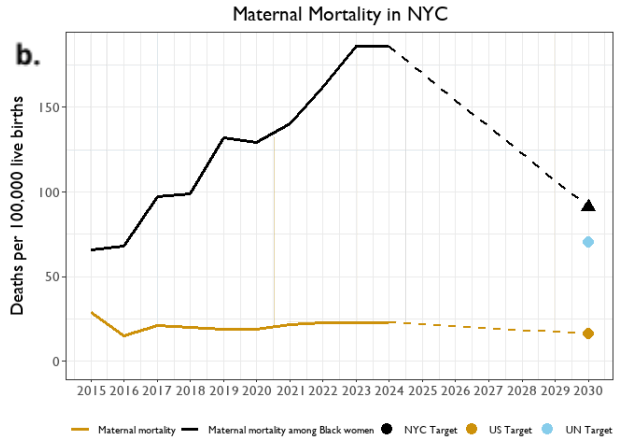
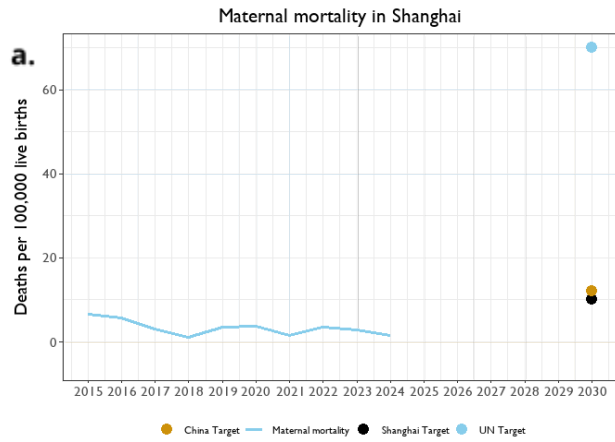
Supplementary Figure 22: Comparing city-level and national-level performance on U.S. 2030 benchmarks. a. 3.1.1 Maternal mortality rate b. 3.2.1 Under-five Mortality Rate c. 3.3.1 HIV Prevalence d. 3.3.2 TB Incidence e. 3.3.4 HBV Incidence f. 3.4.1 Cancer Mortality g. 3.4.1 Cardiovascular Disease Mortality h. 3.4.2 Suicide Mortality Rate i. 3.8.1 Health Insurance j. 7.2.1 Renewable Energy k. 11.1.1 Homelessness l. 11.5.1 Natural Disaster Mortality and Impacts m. 11.5.2 Natural Disaster Economic Loss n. 11.6.1 Solid Waste Management o. 11.6.2 Air Quality p. 13.2.2 Emissions

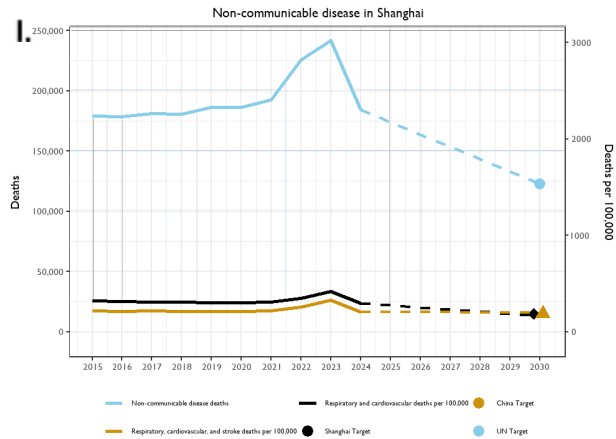
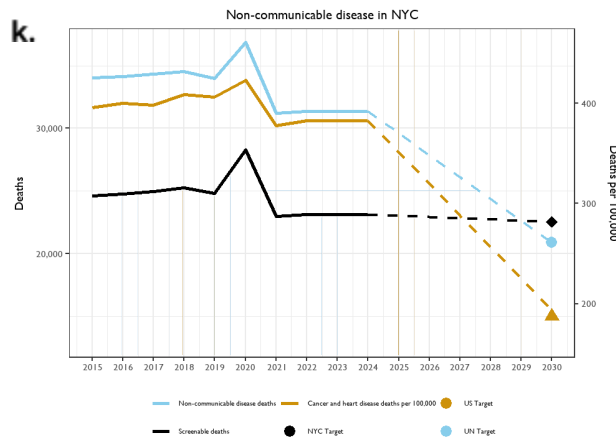
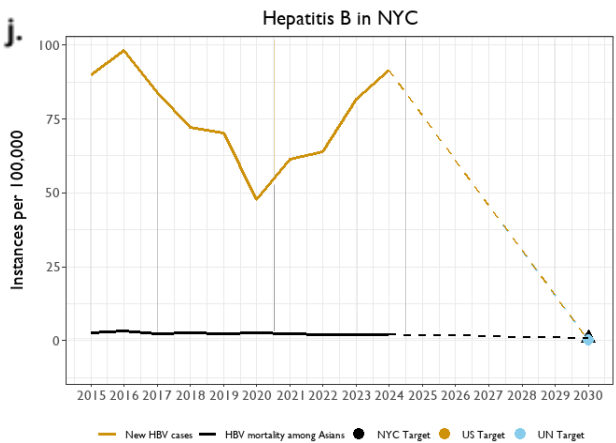
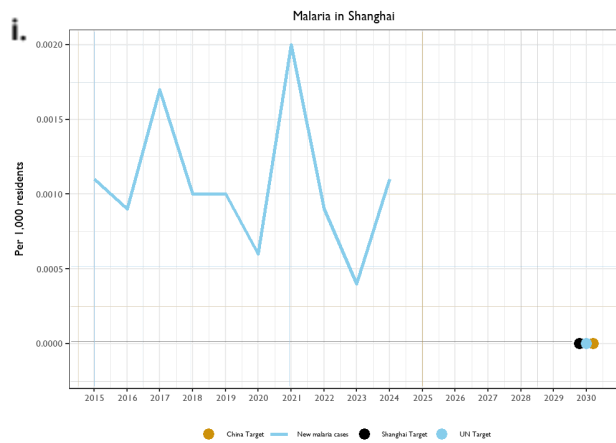
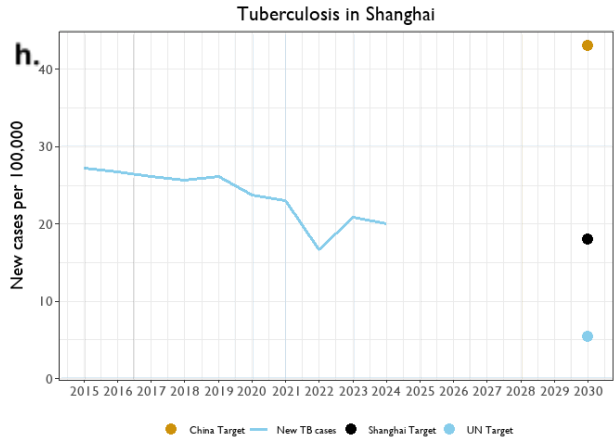
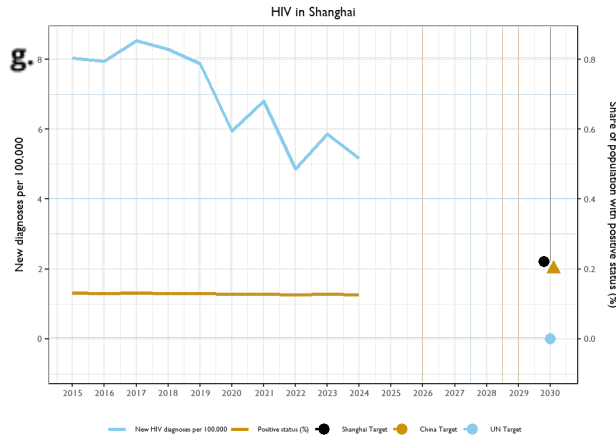


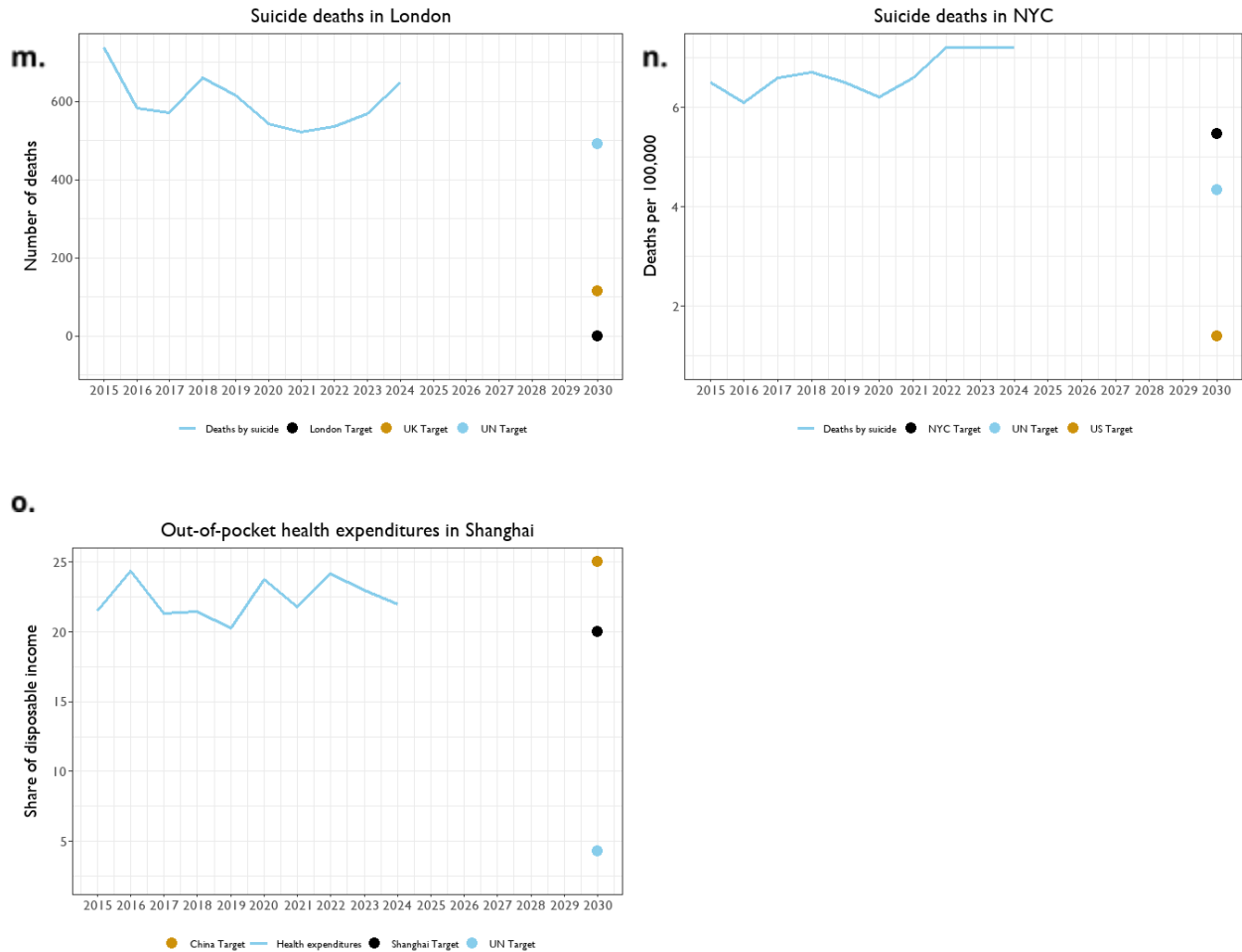




Supplementary Figure 23: Comparing city-level and national-level performance on Chinese 2030 benchmarks. **a.** 3.1.1 Maternal mortality rate **b.** 3.2.1 Under-five Mortality Rate **c.** 3.2.2 Neonatal Mortality Rate **d.** 3.3.1 HIV Prevalence **e.** 3.3.2 TB Incidence **f.** 3.3.3 Malaria Incidence **g.** 3.4.1 Chronic Respiratory Disease Mortality **h.** 3.4.1 Cardiovascular Disease Mortality **i.** 3.8.2 Household Expenditures on Healthcare **j.** 7.1.1 Electricity Access **k.** 7.2.1 Renewable Energy **l.** 7.3.1 Energy Efficiency **m.** 11.6.1 Solid Waste Management **n.** 11.6.2 Air Quality **o.** 11.7.1 Green Space **p.** 13.1.1 Natural Disaster Impacted Population **q.** 13.1.1 Natural Disaster Mortality Rate

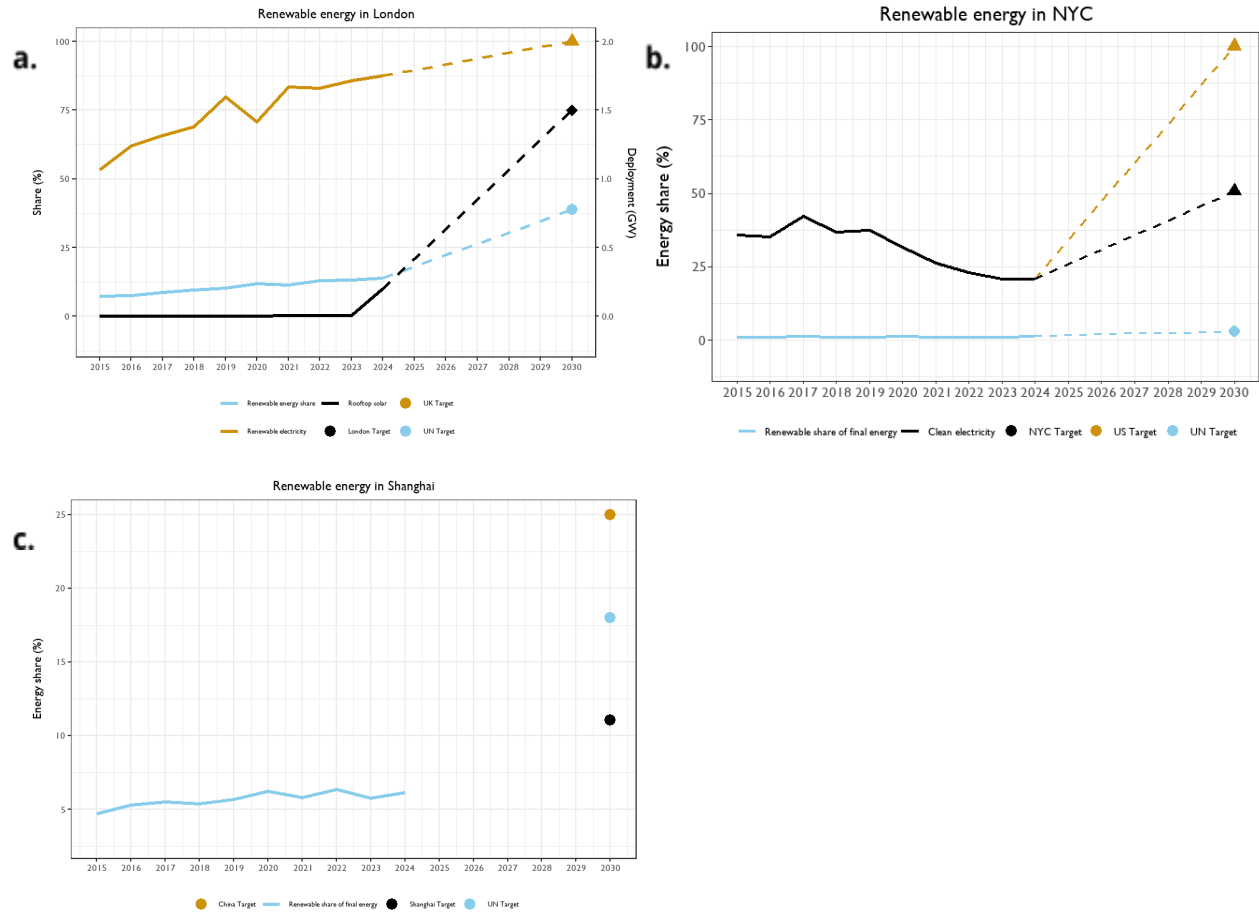




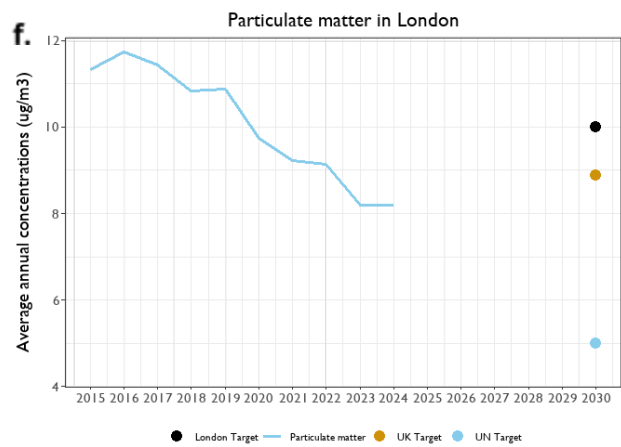
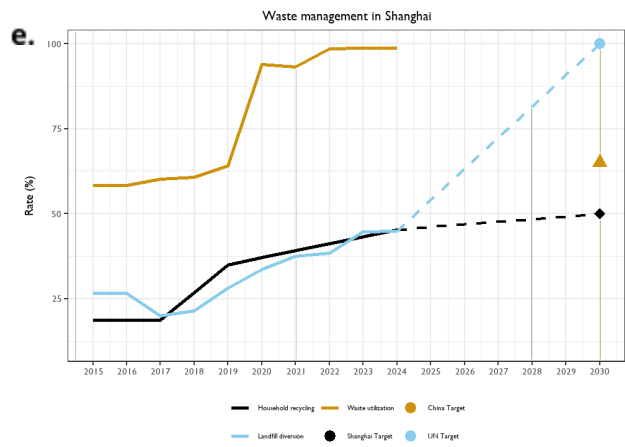
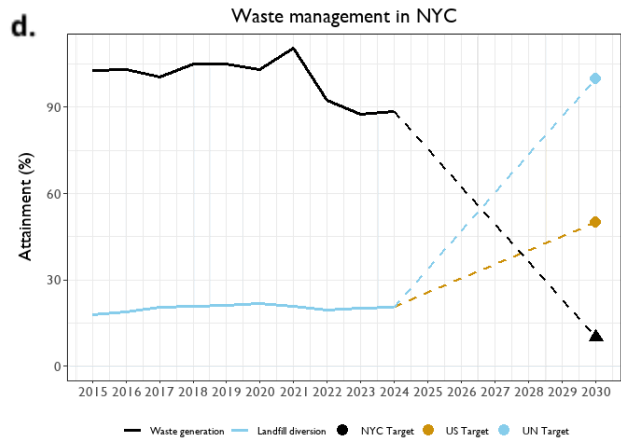
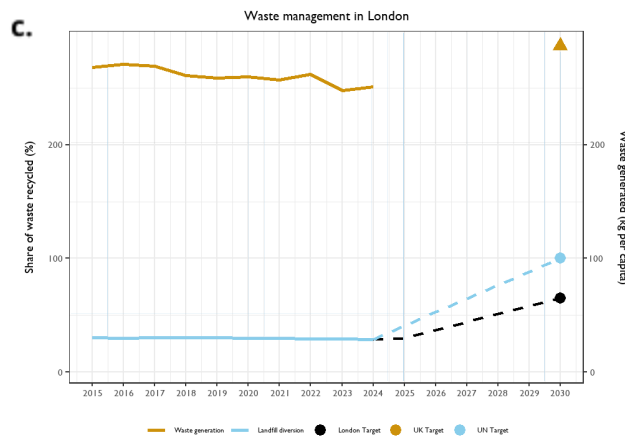
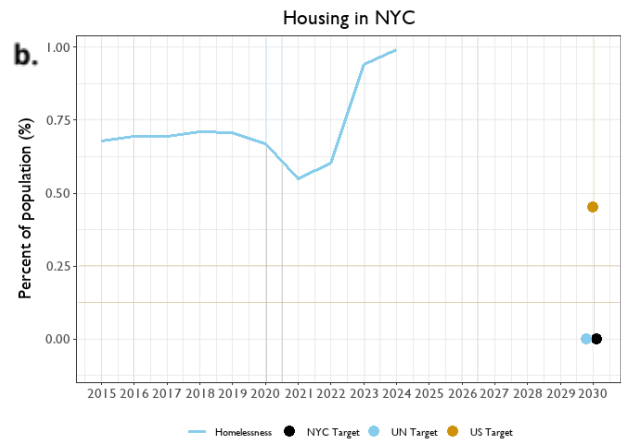
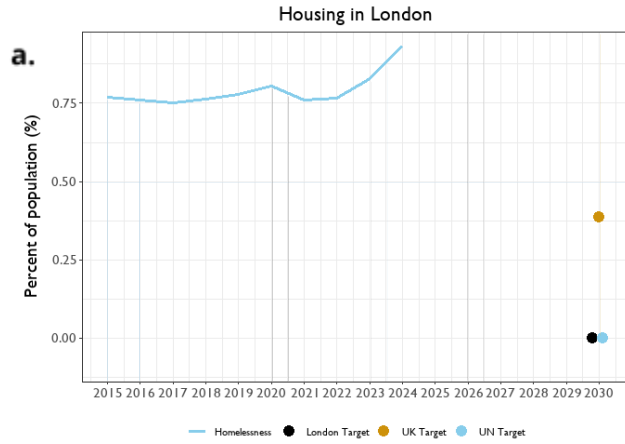


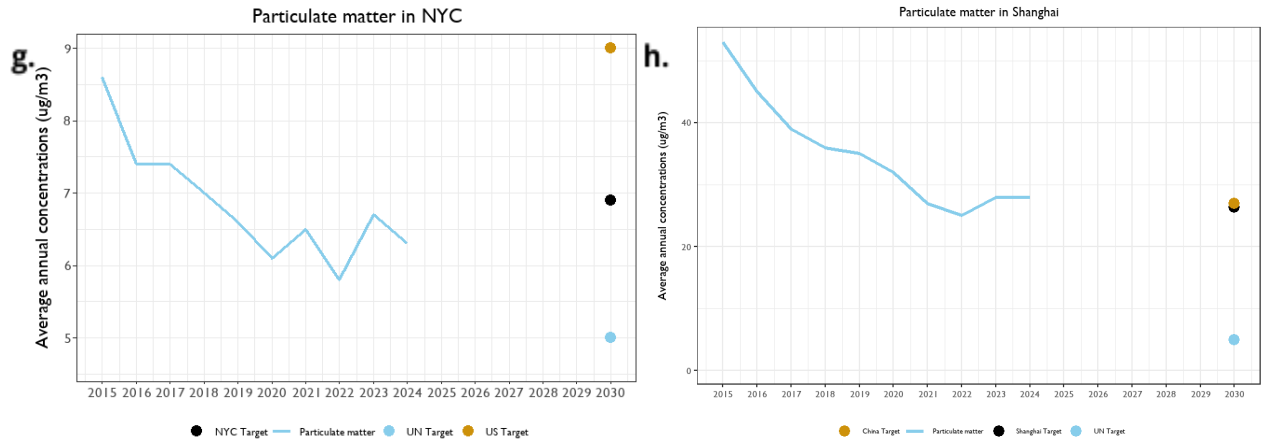
Supplementary Figure 24: Differing targets and attainment towards SDG 3: Health & Well-being. Blue lines depict ongoing progress towards UN targets, while black lines and golden lines depict city and national targets, respectively. Solid lines depict historical progress towards targets. Dashed lines depict progress needed to meet 2030 targets if the targets vary; a lack of dashed lines indicates either uniform 2030 targets or that the 2030 target has already been attained.

a. 3.1.1 in Shanghai **b.** 3.1.1 in New York City **c.** 3.2.1 in Shanghai **d.** 3.2.2 in Shanghai **e.** 3.3.1 in New York City **f.** 3.3.1 in London **g.** 3.3.1 in Shanghai **h.** 3.3.2 in Shanghai **i.** 3.3.3 in Shanghai **j.** 3.3.4 in New York City **k.** 3.4.1 in New York City **l.** 3.4.1 in Shanghai **m.** 3.4.2 in London **n.** 3.4.2 in New York City **o.** 3.8.2 in Shanghai

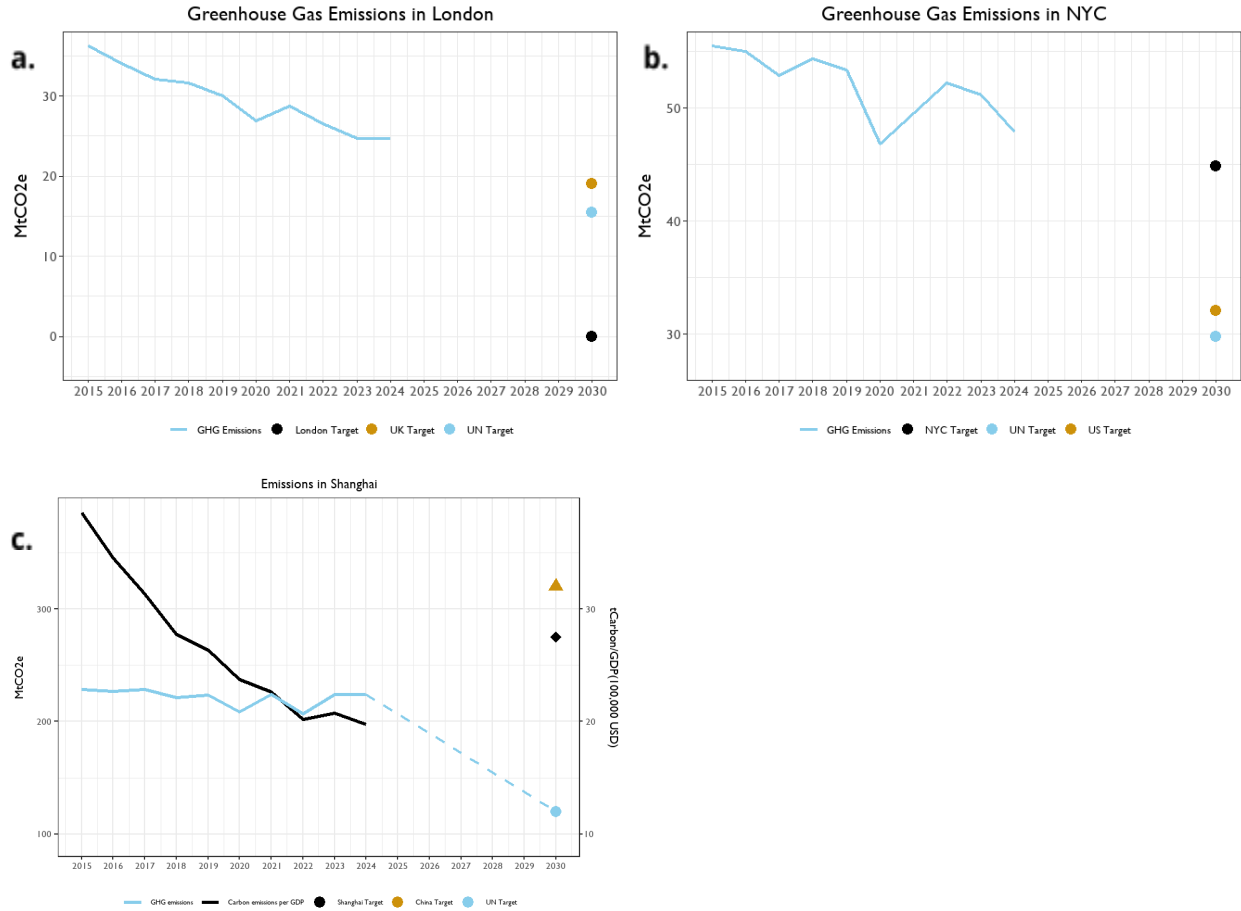


Supplementary Figure 25: Differing targets and attainment towards SDG 7: Clean Energy. Blue lines depict ongoing progress towards UN targets, while black lines and golden lines depict city and national targets, respectively. Solid lines depict historical progress towards targets. Dashed lines depict progress needed to meet 2030 targets if the targets vary; a lack of dashed lines indicates either uniform 2030 targets or that the 2030 target has already been attained. **a.** 7.2.1 in London **b.** 7.2.1 in New York City **c.** 7.2.1 in Shanghai





Supplementary Figure 26: Differing targets and attainment towards SDG 11: Cities. Blue lines depict ongoing progress towards UN targets, while black lines and golden lines depict city and national targets, respectively. Solid lines depict historical progress towards targets. Dashed lines depict progress needed to meet 2030 targets if the targets vary; a lack of dashed lines indicates either uniform 2030 targets or that the 2030 target has already been attained. **a.** 11.1.1 in London **b.** 11.1.1 in New York City **c.** 11.6.1 in London **d.** 11.6.1 in New York City **e.** 11.6.1 in Shanghai **f.** 11.6.2 in London **g.** 11.6.2 in New York City **h.** 11.6.2 in Shanghai



Supplementary Figure 27: Differing targets and attainment towards SDG 13: Climate Action.

Blue lines depict ongoing progress towards UN targets, while black lines and golden lines depict city and national targets, respectively. Solid lines depict historical progress towards targets. Dashed lines depict progress needed to meet 2030 targets if the targets vary; a lack of dashed lines indicates either uniform 2030 targets or that the 2030 target has already been attained. **a.** 13.2.2 in London **b.** 13.2.2 in New York City **c.** 13.2.2 in Shanghai