



CITY OF SOMERVILLE, MASSACHUSETTS
OFFICE OF SUSTAINABILITY AND ENVIRONMENT
KATJANA BALLANTYNE
MAYOR

To: Honorable City Council
 From: Office of Sustainability
 Date: November 8, 2024
 Subject: Steam Trap Replacement

Requesting funds of \$147,902 from the energy stabilization fund for steam trap replacement needed in several municipal buildings. This project is critical to building operations when steam heating systems are involved. Steam traps control the flow of steam distributed throughout the building, and they are known to fail over time, resulting in over/under heating buildings and a significant loss of useful energy. These projects are projected to conserve 52,783 therms of natural gas and 1,044 gallons of #2 fuel oil annually, eliminating 290,968 kg CO2 emissions over the life of the installations, and saving the city \$56,698 in energy use costs annually. This results in a total payback period of 1.8 years for these projects, including projected incentives.

Steam Trap Repair								
Location	Total Cost	Utility Incentive	Net Cost	Estimated Savings				Payback (yrs)
				NG (therms)	#2 Fuel Oil (gallons)	kgCO2	\$/yr	
Brown School Steam Traps	\$3,600	\$294	\$3,306	80	0	425	\$80	41.3
City Hall Steam Traps	\$25,500	\$9,428	\$16,072	3,083	0	16,374	\$3,083	5.2
Cummings School Steam Traps	\$17,225	\$4,695	\$12,530	1,538	0	8,168	\$1,538	8.1
DPW Steam Traps	\$33,275	\$10,500	\$22,775	19,933	0	105,864	\$19,933	1.1
Elderly School Steam Traps	\$55,502	\$16,093	\$39,050	28,149	0	149,499	\$28,149	1.4
Rec Dept Steam Traps	\$12,800	\$5,151	\$7,649	0	1,044	10,638	\$3,915	2.0
Total	\$147,902	\$46,161	\$101,382	52,783	1,044	290,968	\$56,698	1.8