

City of Philadelphia



Council of the City of Philadelphia
Office of the Chief Clerk
Room 402, City Hall
Philadelphia

(Resolution No. 070276)

RESOLUTION

Authorizing the Committee on the Environment to hold public hearings to investigate ways to mitigate the conditions that create an urban heat island in Philadelphia.

WHEREAS, Urban heat islands form as natural land cover is replaced with large buildings, infrastructure, and cement for roadways and parking lots. Many cities, including Philadelphia, can average up to 10° F warmer than their surrounding suburbs; and

WHEREAS, By displacing trees and vegetation, cities remove their environment's natural cooling capabilities. Tall buildings and narrow streets in cities trap air and reduce airflow, which also contributes to warmer temperatures. Furthermore, exhaust from vehicles and factories adds extra heat to the city's atmosphere; and

WHEREAS, The U.S. Environmental Protection Agency identifies 3 strategies for cities to reduce the urban heat island effect. By installing cool or vegetated green roofs; by planting trees and vegetation; and by switching to cool pavements, cities can replace and replicate natural cooling systems that increase air flow and reduce air temperature; and

WHEREAS, Cool or vegetated green roofs reduce a roof's temperature by up to 70° F. Cool roofs are coated with a reflective material that reflect much of the sun's energy and release a large portion of heat that is absorbed. Green roofs cool the environment through evapotranspiration (evaporation of water from leaves). This reflectance and thermal emittance allows the building to stay cooler, which results in a cooler environment both in and around the building; and

WHEREAS, Planting trees and vegetation greatly helps to reduce the heat island effect while offering other benefits such as cooling cost reduction; and

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WHEREAS, Cool pavements offer two benefits: surface reflectivity and permeability. These two factors allow for evaporation and less storage of heat, which in turn helps to cool its surroundings; and

WHEREAS, These measures also provide residents, communities and the city as a whole major benefits such as energy-savings, storm water reduction, water quality improvement and cleaner air; now therefore

RESOLVED, BY THE COUNCIL OF THE CITY OF PHILADELPHIA, That City Council's Committee on the Environment is hereby authorized to hold public hearings to investigate ways to mitigate the conditions that create an urban heat island in Philadelphia.

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CERTIFICATION: This is a true and correct copy of the original Resolution, Adopted by the Council of the City of Philadelphia on the twelfth of April, 2007.

Anna C. Verna
PRESIDENT OF THE COUNCIL

Patricia Rafferty
CHIEF CLERK OF THE COUNCIL

Introduced by: Councilmember Kenney

Sponsored by: Councilmembers Kenney, Greenlee, Rizzo, Goode, DiCicco, Miller, Ramos, Savage, O'Neill, Campbell, Reynolds Brown and Blackwell