Problem
As urban centers expand to accommodate Florida’s increasing population, the impacts associated with the heat island effect are growing. Impaired water quality; incidents of heat related mortality; increased energy consumption; and elevated emissions of air pollutants and greenhouse gases are a few examples of heat island dangers. These impacts place a significant strain on public safety services and considerably increase energy costs for local government operations.

a. Solutions:
   i. Adopt cool/green roofing standards for new roof construction and replacement roofs.
   ii. Require all government owned or managed buildings to convert to cool or green roofs within 10 years.
   iii. Establish a sustainability fund for collection of ordinance waivers fees. The sustainability fund shall be used for local government sustainability projects.

b. Goals:
   i. Reduce energy costs for consumers and local governments.
   ii. Reduce air pollution and greenhouse gas emissions.
   iii. Increase air quality while decreasing heat related breathing complications.
   iv. Reduce heat related mortality.
   v. Enhance stormwater management and water quality.

c. Ordinance elements:
   i. Prohibit asphalt roof shingles in new roof construction or replacement roofs.¹
   ii. Collection of a “sustainability fee” from the property owner or applicant if a sustainable roofing system is not utilized.¹
   iii. Define Sustainable roofing system as a solar roof, blue roof, white roof, cool roof, green roof, metal roof, or any other roofing system recognized by a green building certification agency that reduces heat island effect, allows for the reuse or retention of stormwater or reduces greenhouse gases.²
   iv. Define a Green roof as a green space created by layers of growing medium and vegetation added on top of a traditional roofing system. It may also include additional layers such as a root barrier and drainage and irrigation systems.

d. Financing:
   i. Comes from taxes allotted for federal, city, and or county respectively.
   ii. Fees collected for permitting.

e. Counties and Cities that implement or proposed such programs:
   i. City of Miami Beach
      1. Can be found:
         a. City of Miami Beach
   ii. City of Dallas, Texas
      b. City of Dallas, Texas
   iii. City of Denver, Colorado
      c. City of Denver, Colorado

¹ City of Miami Beach Ordinance Article 4, Division 1, Section 142-875
² City of Miami Beach Chapter 114, Section 114-1