WATER SPRAY TO COPE WITH HEAT WAVES IN CITIES

OBJECTIVE

Become resilient to heat island.

DESCRIPTION

Lowering the temperature through the use of water vaporizers is a practice that can increase the degree of resilience with respect to heat islands. Cooling by water spray (fountains) can decrease the air temperature by evaporation, absorption of heat and conduction of heat. The cooling effect of flowing water is greater than that of standing water, due to a better mix of flowing water and air and with the conduction of heat. Water spray from a fountain has an even greater cooling effect because of the large contact surface of water and air, which favours evaporation. When in contact with skin, water spray can also have a cooling effect due to evaporation.

EXPECTED RESULTS

Built environment options and technological options.

RESULT INDICATORS

Decreased air temperature [°C]

INVOLVED ACTORS

Stakeholders related to the choices to implement the new infrastructure in the cities.

EXPECTED TIMELINE FOR ACTION

- Short term (1-4 years)

BEST PRACTICES

- Antwerp – Belgium
- Košice and Trnava – Slovakia

CRITICALITIES

This measure could determine an increase in water consumption, which could be unsustainable during droughts and heat waves.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Grey

SECTOR OF ACTION

- Public health
- Urban settlement
- Water resource management

CLIMATE IMPACTS

- Extreme temperatures

IMPLEMENTATION SCALE

- Municipality

SOURCE

https://climate-adapt.eea.europa.eu/metadata/adaptation-options/water-uses-to-cope-with-heat-waves-in-cities