



PROFESSIONAL GREEN BUILDING COUNCIL
Symposium on Urban Climate & Urban Greenery 2009

Panelist:

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Topic: Urbanization and Hong Kong Climate

Abstract:

Analysis of the temperature records at the Hong Kong Observatory Headquarters showed that there was an average rise of 0.12°C per decade since 1885 and the rate of increase had become faster in the latter half of the 20th century. Such an increase in the temperature can be attributed to the combined effect of global warming and local urbanization. In respect of the warming due to urbanization, there are several contributing factors: changes in land use, heat capacity of buildings, reduced air ventilation as a result of dense urban development, anthropogenic heat emission, and the smaller sky view factor which hinders the heat release back to space. Besides temperatures, urbanization could also affect other meteorological elements of a city, including wind speed, evaporation, solar radiation and precipitation distribution.