

7 December 2009

## Request letter for the United Nations Framework Convention on Climate Change Conference of Parties 15 (COP15) and Chapter 5 Meeting of the Parties to the Kyoto Protocol (COP/MOP5)

Organization for Landscape and Urban Green Technology Development of Japan \*

Our missions are the mitigation of and adaptation to climate change, protection of biodiversity and improvement of the urban environment. To solve these environmental issues, it is important to take appropriate strategies for potential urban growth.

The world reached an invisible but momentous milestone in 2008: for the first time in history, more than half of the population, 3.3 billion people, were living in urban areas. By 2030, this figure is expected to rise to about 5 billion.

Since the world's urban population has grown very rapidly (from 220 million to 2.8 billion) in the 20th century, there will be massive urban growth in developing areas in the next few decades.

No country has ever achieved significant economic growth without urbanization in industrial development. Although poverty exists in cities, cities also attract people wishing to escape from poverty. If urbanization in developing areas can help their development as well as solve social and environmental problems, forward-looking strategies are needed to ensure their problems will not get worse.

It is worth pointing out that the important point is how cities expand rather than the size of the city itself. This is because urban areas will occupy much less land than that used for agricultural activities, forestry and grazing, which may cause erosion or saliferous areas.

Therefore, governments and local authorities in cities should develop appropriate strategies to greatly improve the social, economic and environmental conditions for a majority of people in the world. This should be carried out with citizens and with the support of international organizations.

As is evident from the results of our research and the fact sheets compiled in 2008 by ICLEI with the support of Countdown 2010, ECNC and LAB etc., it is important to recognize that climate change may cause loss of biodiversity, to recognize the role of biodiversity in protecting the climate, and to recognize the role of local authorities in biodiversity management for mitigating climate change and enabling people to adapt to climate change. It is also necessary to appreciate the roles of

cities and local authorities, and the effects of cross-border networks among them.

Our objectives are as follows.

1. Developed countries, such as Japan, should take the lead in reducing greenhouse gas emissions so that people can formulate a new framework for mitigating global warming, which is a threat to biodiversity. This will lead to the success of the United Nations Framework Convention on Climate Change Conference of Parties 15 (COP15) to be held in Copenhagen, Denmark, on 7 December 2009.
2. We will observe Decision IX/28 of the United Nations Convention on Biological Diversity Conference of Parties 9 (COP9) held in Bonn, Germany, May 2008. We reaffirm promoting the engagement of cities and local authorities to mitigate and adapt to global warming,
3. There is a close relationship between global climate change and biodiversity loss: when the climate changes, particular species may disappear in their current habitat and other species may replace them. On the other hand, biodiversity management can play an important role in mitigating climate change and reducing its impacts. Moreover, strategies for integrating biodiversity management and climate protection may be beneficial for cities and local authorities, especially in urban areas where populations and various functions converge.
4. We emphasize that the following three policy initiatives are particularly important. Firstly, cities need a broader long-term vision for the use of urban space to reduce poverty and to promote sustainability, while respecting the regional identities shaped by history, culture and landscape. Secondly, institutions and specialists in the fields of population, cities, and landscapes should play a key role in supporting community organizations, social movements, governments and the international community to improve future urban expansion. Thirdly, funds for global warming and biodiversity conservation from the developed countries to developing areas should be invested in urban policy more aggressively.

Organization for Landscape and Urban Green Technology Development of Japan

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<http://www.greentech.or.jp/english/index.php>

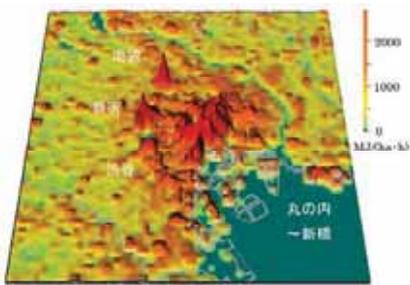
We are researching on the inventory of revegetation on the Kyoto Protocol, and have several plans for Convention on Biological Diversity COP10 to be held in Nagoya City, Aichi Prefecture in October 2010.

URBAN GREEN TECH GRAFFITI

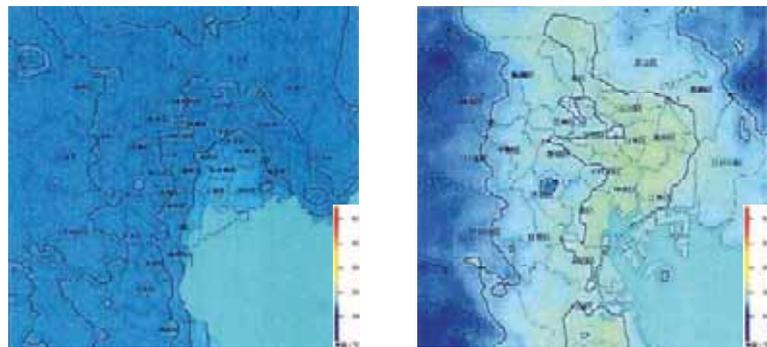
Heat Island Phenomenon Countermeasures and Greenery

In recent years, the heat island phenomenon has developed rapidly into a social problem producing higher temperatures, more frequent sultry nights and growth in the number of heat strokes. The phenomenon has been identified as having links to atmospheric pollution as well as regional downpours, and has attracted attention as an environmental problem specific to city areas. As shown in the Japan Government's Outline of the Policy Framework to Reduce Urban Heat Island Effects of March 2004, promotion of countermeasures from various perspectives such as reduction of artificially-generated exhaust heat, increased land cover, improvement in urban formats and lifestyles, reinforced monitoring and management systems as well as investigative studies have become a matter of urgency.

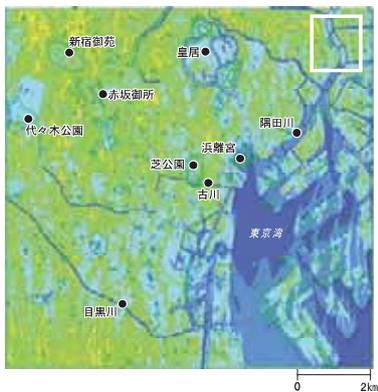
In view of this situation, this issue considers various perspectives such as heat environment and greenery in macro urban areas and cities, architectural designs and greenery for alleviating the heat island phenomenon, heat island phenomenon countermeasures and urban greening techniques, and green city development, under the special theme, Heat Island Phenomenon Countermeasures and Greenery, and also presents the latest findings from leading researchers. (Page references below refer to pages in this issue)



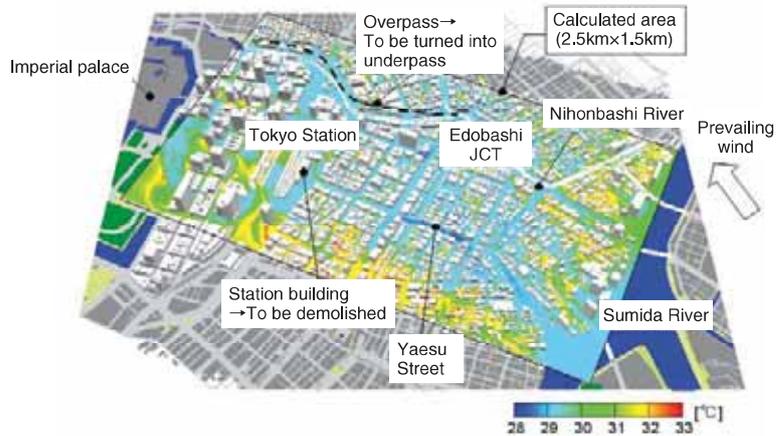
Distribution of artificially-generated exhaust heat in the 23 wards of Tokyo (Summer 2:00 p.m., sensible heat): P. 6



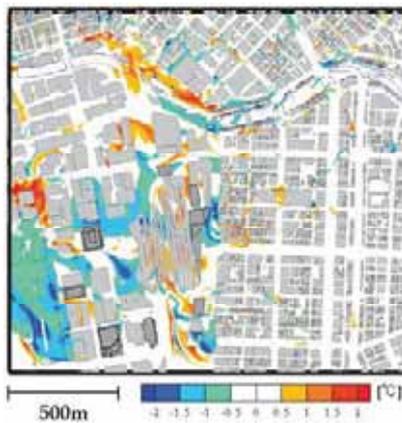
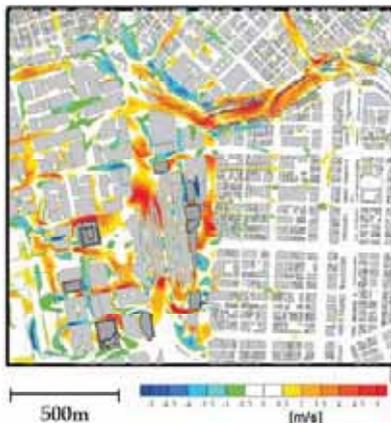
Numeric simulation of temperature distribution during nighttime Left: 1930, Right: Present: P. 7



Numeric temperature analysis result (Summer 2:00 p.m., 5 meters above ground, 2005): P. 7



Outline of Nihonbashi/Yaesu District (with existing temperature distribution): P. 8

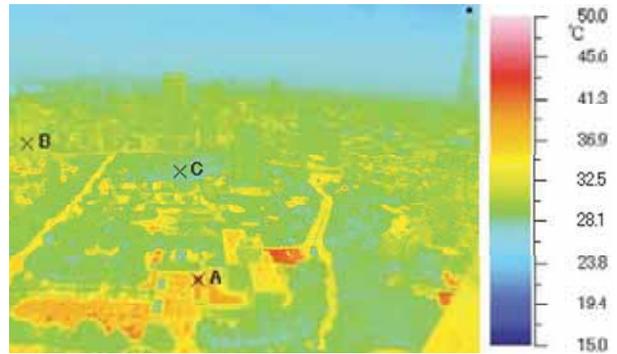


Nihonbashi/Yaesu District: Changes in wind speed (left) and temperature (right) 5 meters above ground before and after development: P. 9 (Source) Yasunobu Ashie P. 6-9

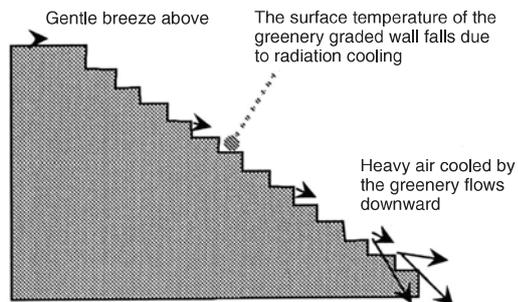
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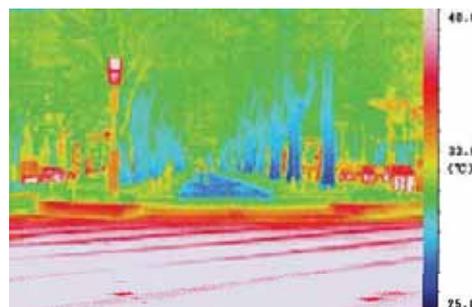
Comparison of leaf surface temperatures (Osaka City: Green-wall experiment area designated by Osaka Prefecture)  
 (Source) Hiroyuki Yamada P. 13



Thermal image taken using infrared thermo-camera: Comparison of surface temperatures  
 A (structure roof), B (structure wall), C (woodland) (27 Jul. 2006, 12:50 p.m.)  
 (Source) Mariko Handa, Kazutaka Imai, Migiwa Matsui P. 24



External view of ACROS Fukuoka and cold air current flowing along its graded wall  
 (Source) Aya Hagishima P. 16



Conditions at Hirose-Dori (left) and Jozenji-Dori (left), in Sendai city, and their thermal images (10 Aug. 2006, 2:30 p.m.)  
 (Source) Akashi Mochida, Aya Kikuchi P. 19