Mitigating the Effects of Urban Heat Island Phenomenon through Bioclimatic Landscape Approach: A case study of Putrajaya

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BY:

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Contents

2. Letter of Offer (Research Grant)

Surat Kami : 600-RMI/DANA 5/3/RIF (111/2012)
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Fakulti Senibina Perancangan dan Ukur
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Tuan/Puan

KELULUSAN PERMOHONAN DANA KECEMERLANGAN (RIF) 08/2012

Tajuk Projek	Mitigating the Effects of Urban Heat Island Phenomenon Through Bioclimatic Landscape Approach: A Case Study of Putrajaya
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Kategori Projek	Fakulti Berimpak Penyelidikan
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Ketua Projek	Dr. Nik Hanita Nik Mohamed

Dengan segala hormatnya perkara di atas adalah dirujuk.

2. Sukacita dimaklumkan pihak Universiti telah meluluskan cadangan penyelidikan tuan/puan untuk membiaya projek penyelidikan di bawah Dana Kecemerlangan UiTM.

3. Bagi pihak Universiti, Institut Pengurusan Penyelidikan (RMI) mengucapkan tahniah kepada tuan/puan di atas kejayaan ini dan seterusnya diharapkan berjaya menyiapkan projek ini dengan cemerlang. Untuk makluman, penggunaan peruntukan adalah tertakluk kepada Garis Panduan Fakulti Berimpak Penyelidikan. Peruntukan tambahan akan diberi setelah laporan berkala dihantar kepada RMI dan berjaya menghasilkan sekurang-kurangnya satu (1) penerbitan berindeks dalam SCOPUS/ISI/ERA.

4. Untuk tujuan mengemas kini, pihak tuan/puan adalah diminta untuk menyusun perancangan semula bajet yang baru dan mengesahkan setuju terima projek penyelidikan dalam tempoh dua (2) minggu. Selain itu, kertas cadangan lengkap juga harus dikemukakan dalam tempoh tiga (3) bulan dari tarikh surat ini. Bersama-sama ini disertakan tatacara pengurusan projek penyelidikan untuk rujukan dan perhatian pihak tuan/puan.

Sekian, harap maklum.

"SELAMAT MENJALANKAN PENYELIDIKAN DENGAN JAYANYA"

Yang benar

MUSTAFAR KAMAL HAMZAH
Ketua Penyelidikan (Sains dan Teknologi)

Disampaikan

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May ALLAH S.W.T bless us all. Ameen

5. Report

5.1 Proposed Executive Summary

The issues on climate change and global warming has received tremendous worldwide attention due to the occurrence of extreme weather and unprecedented climate events. Nowadays, almost all cities are sources of heat owing to the complexity of urban-designed structures with higher thermal admittance and anthropogenic heat. The conversion of natural landscape to a built, impervious landscape in urban area eventually caused Urban Heat Island (UHI) phenomenon. This can affect long-term environmental sustainability and resilience towards quality of life of urban dwellers in the future. Therefore, it is important to reduce these effects from further damaging the physical environment and life quality. This research is an attempt to study and investigate the potential of urban landscape approach to reduce UHI phenomenon. This is especially true for humid tropics where the abundance of natural vegetation can be utilised to provide thermal benefits. Specifically, the research objectives are i) to investigate the contributing factors and effects of Urban Heat Island phenomenon and ii) to propose strategies in urban landscape approach towards reducing UHI phenomenon. This research will involve site observation for temperature distribution study, extensive and systematic review of literature to outline the design strategies. The significance of this research is to contribute towards improving urban liveability and thermal comfort for urban community. Besides, this research is hope to guide the practitioners in landscape architecture discipline, policy makers and urban designers to incorporate sustainable landscape design approach for improving urban thermal comfort.

Keywords: Urban Heat Island Phenomenon, Sustainable Landscape Design Approach, Sustainable Development, Urban Thermal Comfort