Supporting a Greener, Healthier Built Environment

“We Shape Our Buildings, and afterwards Our Buildings Shape Us”
Winston Churchill, Oct 1943, British Prime Minister

“We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect”
Aldo Leopold 1887-1948 American Ecologist, Conservation Ethics, Author of A Sand County Almanac

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**Pandora – The Goddess of Innovation?**

The first human woman created by the Gods (Greek Mythology).

**Pandora’s box?**

An action that may seem small or innocent, but that turns out to have severely detrimental and far-reaching consequences.

**The Built Environment’s Pandora Box?**

“Getting things built” without considering the consequences of one’s action.

“Economic Growth does not translate into Human Development Progress” 2013

*Human Development Report (United Nations)*

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“Convenience” oriented Built Environment ~ Public Health Crisis?

Researchers have found that using the travelator at airports, especially at busy times, can actually slow you down because people reduce their walking pace on the human conveyor belts and cause blockages.

"Moving walkways are the only form of transportation that actually slow people down," said Dr Young.
How Physically active are you?

Assessment of Physical Activity among Undergraduate Students in a Local University using a Pedometer

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ABSTRACT: The objective of this study was to assess the pedometer-determined physical activity among a sample of undergraduate students. To obtain the data required, the subjects’ total number of steps was assessed using pedometer readings over the course of three days. Measurements of subjects’ height, weight, waist and hip circumferences, and blood pressure were also recorded. A total of 174 young adults were involved in this study. The mean age was 20.7 ± 1.3 years; 40.2% were male, and 59.8% were female. The mean body mass index (BMI) was 22.1 ± 4.0 kg/m² and the prevalence of overweight and obesity was 10.4% and 3.4%, respectively.

Subjects with fewer than 6594 steps per day (< 33rd percentile) had a higher systolic blood pressure than those who walked more or equal to 6594 steps per day (111 ± 14 mmHg vs. 106 ± 11 mmHg; t=-2.42, p<0.05).

Do you take the Stairs to work/your residential unit instead of the escalators?

Do you commute to work by bicycle or public transport?

How many steps do you take in a day?

How will you rate KL as a pedestrian and bike friendly city?

Biophilic Design - When was the last time you touch a non man made item? Vegetation?

When was the last time you take a walk in the park/ forest reserve?

10,000 steps a day campaign to improve your health

KUALA LUMPUR: Malaysians have been asked to walk 10,000 steps a day as part of their healthy lifestyle regime.

Health Minister Sen Datuk Liow Tiong Lai said the 10,000-steps-a-day campaign was intended to push the people to improve their health by walking more and reducing their intake of unhealthy food.

He said many Malaysians had developed unhealthy lifestyle practices as a result of rapid development and economic progress.

These practices had led to an increase in non-communicable diseases such as hypertension, high cholesterol and obesity, he added.

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REGENERATIVE DESIGN – CELEBRATING HUMAN POWERED COMMUTING METHODS

POLICY
- Car Free Cycling Day
- Car Free Zone
- Road Space Rationing
- Price Road during Peak Hours
- Encourage Car Pooling
- Discourage single occupancy vehicle

INCENTIVES
- Cycle To Work Scheme
- Extra Mileage Claim
- GST exemption on Bike Equipments
- Companies Provide Bicycles along with Salary Package
- Dedicated Insurance Health Care for Cyclist

INFRASTRUCTURE
- Secured Bicycle Parking Space
- Shower Facilities
- Bicycle Lanes
- Free Bicycle Maintenance Stops

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Stairs that are located close to escalators are used more frequently than if located in isolation. Stair usage is often not encouraged by building and occupational health and safety regulations.

Volkswagen converted a set of steps at the Odenplan subway station in Stockholm into working piano keys. The car company found 66 per cent more people than normal chose the musical stairs over the escalator.
REGENERATIVE DESIGN – PUTTING IN THE FIGURES

A study in the US shows that climbing two flights of stairs each day, leads to an average person losing 2.7 kg a year. It also indicated that taking the stairs has cardiovascular benefits and is associated with reduced risk of coronary heart disease. *(Brownell, Stunkard and Albaum, 1980)*

Regular Cyclists have health benefits 20 times superior to the risk of accident. A UK study calculated a ratio of 20 to 1 between the general health benefits deriving from regular cycling and the incurred health risks of cycling. *(European Cyclists Federation)*

People who cycle to work have a 39% lower all-cause mortality rate than those who do not. *(Anderson et al, 2000)*

Cycling has a positive effect on emotional health – improving levels of well-being, self-confidence and tolerance to stress while reducing tiredness, difficulties with sleep and a range of medical symptoms. *(Boyd, H., Hillman)*
EXTRA - Infographic of ‘Green Office vs Conventional Office’

Typical office in Malaysia

Why?
- Because suffering from
  - No window
  - No view to nature
  - No daylight
  - No individual control of temperature or light level
  - No healthy air
  - No relief from noisy air diffuser
  - No comfortable seat
  - No exercise option with shower facilities

Most people spend 90% of their lives indoors.

This is NOT the answer!

I can’t wait to knock off from work!

Closed door
Cubicle

Office of IEN Consultants, Malaysia

Removed suspended ceiling gives more lofty office
Up/down light fixture
Silent fabric air duct zips for easy washing to get clean air
Napping room
Folding bicycles (electric/manual)
Recycling bins

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