

# Energy, Environment and Sustainability of Green Buildings



**Shamzani Affendy Mohd Din  
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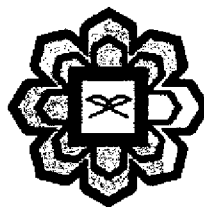
**INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA**

# ENERGY, ENVIRONMENT AND GREEN BUILDINGS

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Editors

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INTERNATIONAL ISLAMIC UNIVERSITY OF MALAYSIA

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### **4.1 INTRODUCTION**

It has been quite noticeable in the last few decades that climate is no more stable. It is getting harsh and full of extreme events from time to time all through the world. Parallel to the progressive technology that helps spread of world news and information on daily bases, people everywhere today are aware of heat waves, floods, heavy rains, droughts, typhoons and the spread out of deserts here and there. It is becoming a daily affair of human life to follow up.

Global Warming refers to the rising average temperature of Earth's atmosphere and oceans and its related effects. Global warming is one of the major phenomena of Climate Change.

### **4.2 CAUSES OF CHANGE**

There is always Natural Change on Climate taking place through the history of the Earth's life. Scientists (as per IPCC fourth assessment report 4AR- 2007) monitored an increase of about 0.8°C at the Earth's average surface temperature during the last 100 years. The fact that over two third of this increase has occurred only during the last 30 years, gave an unequivocal interpretation that made scientists more than 90% certain of its anthropogenic causes. Change occurring today (since 1850) is basically a combination of both natural atmospheric concentrations and anthropogenic emissions that increase CO<sub>2</sub> content in the atmosphere as represented by Figure (22)

Increasing concentration of Greenhouse Gases produced by Human Activities, such as deforestation and burning of fossil fuel, is the responsible element of this rise of temperature. These findings are recognized by the national science academies of all the major industrialized countries. Figure (23) is shows the mechanism of the greenhouse effect on raising the earth temperature.