

Energy, Environment and Sustainability of Green Buildings



**Shamzani Affendy Mohd Din
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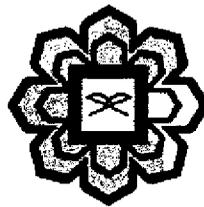
IIUM PRESS

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

ENERGY, ENVIRONMENT AND GREEN BUILDINGS

Editors

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INTERNATIONAL ISLAMIC UNIVERSITY OF MALAYSIA

Published by:
IIUM Press
International Islamic University Malaysia

First Edition, 2011
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Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Individual contributors copyright © Asst. Prof. Dr. Shamzani Affendy Mohd Din, Moustafa Anwar Moustafa, Rawia Marwan Abdul Aziz, Soran Hama Aziz Ahmed, Hamror Shikheldin & Azrina Alip: Energy, Environment and Sustainability of Green Buildings

ISBN: 978-967-418-034-8

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM
(Malaysian Scholarly Publishing Council)

Printed by :
IIUM PRINTING SDN. BHD.
No. 1, Jalan Industri Batu Caves 1/3
Taman Perindustrian Batu Caves
Batu Caves Centre Point
68100 Batu Caves
Selangor Darul Ehsan

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5.1 INTRODUCTION

5.1.1 Electricity generation and consumption

Malaysia's total installed capacity at the end of 2004 was at 20,052.6 megawatt (MW), lower by 0.3 percent from 20,118.7 MW in 2003. Ninety-one percent of the installed capacity is located in Peninsular Malaysia, 5 percent in Sarawak and the remaining in Sabah. Electricity generation registered 89,098.4 gigawatt-hour (GWh) – an increase of 8.1 percent – as compared to 82,406.1 GWh in 2003. Peninsular Malaysia recorded the highest demand at 12,023 MW, while for Sarawak the figure was 686.4 MW. Sabah West Coast grid needed 318 MW and Sabah East Coast grid consumed 168 MW. (Christopher Teh)

In terms of electricity generation mix, the share of natural gas as energy input in power stations has decreased to 59.4 percent *vis- - v i s* 65.3 percent in 2003. The share of coal, however, increased from 24.6 percent in 2003 to 30 percent in 2004. Hydropower followed next with its share at 7.5 percent, while the remaining constituents were fuel oil and diesel, at 1.5 percent each. Therefore it is understood that hydroelectric provides the cheapest source of energy and that is why large dams are generally being built not only in Malaysia but also in other countries.