

EVENTS

18 April 2009
CPD Seminar
Green Building Index Malaysia:
MS1525:2007
Code of Practice on Energy
Efficiency and Use of
Renewable Energy for
Non-Residential Buildings
 by En Mohamed Nizar Musa,
 Ir Ng Pak Soon, Ar Von Kok Leong
 & Ir Ahmad Izdihar Supaat
 PAM Centre Kuala Lumpur

25 April 2009
CPD Seminar
From Concept to Realisation
 by Kun Lim Architect
 The Saujana Kuala Lumpur

27 June 2009
CPD Seminar
Sustainable Neighbourhoods
- A Practitioner's Perspective
 by Ar Mazlin Ghazali
 PAM Centre Kuala Lumpur

3 - 4 July 2009
Datum:KL 2009
Basic design: the new
intelligence?
 Kuala Lumpur Convention Centre
 E pusatbinaan@myjaring.net or
 faycheah@gmail.com

4 - 7 June 2009
Vietnam Architecture
Exhibition 2009
 Saigon Exhibition & Conventional Centre,
 Ho Chi Minh City
 Organised by Ho Chi Minh City
 Association of Architects
 T +84 835126934 F +84 835126938
 E hkt@vietnam-arc.com
 www.vietnam-arc.com

Kindly note that the scheduled events above
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 03-26934182 for confirmation.

GREEN DESIGN FORUM AND PREVIEW OF GREEN BUILDING INDEX MALAYSIA

3 January 09 • KLCC

Introduction by Convener



From left Ar Lee Chor Wah, Senator Penny Wong, Mr Andrew Ford and
 Ir Dr Abdul Majid Abu Kassim

Green Buildings

Green Building Index Malaysia is a profession driven initiative to lead Malaysia towards a more responsible built-environment, for now and for the future.

With the realisation that the built environment contributes significantly to climate change over the entire lifetime of all buildings, Green Building Rating was conceived in the 1990s, to guide developers, development and building professionals, contractors, owners, managers and end users on the impact of their choices to the environment.

In recent years, Malaysia has been introduced to Green Building Ratings originating from UK, USA, Australia, Japan and Singapore.

However, a green building rating system by its nature is very dependent on the local environment, including climate, resources and current state of development.

As Malaysia differs markedly in these areas with these countries, our rating criteria must be customised accordingly.

Our rating priorities, for example, need to acknowledge our shortcoming in public transportation, which may have lesser emphasis in the rating from another country with a better-developed public transportation network.

With increasing demand and expectation, especially from Malaysian and Multinational Companies with CSR objectives that call for them to support only environmentally friendly initiatives, the need for Malaysia's own Green Building Index became more evident.

Green Building Index Malaysia

In August 2008, PAM decided to form a committee headed by PAM Past President Ar Dr Tan Loke Mun, with the primary task to develop Green Building Index Malaysia, and the formation of a Green Building Index Accreditation Panel that certifies the rating. Immediately over several discussions in August, PAM presented the proposal of Green

QLASSIC

Quality Assessment System In Construction

QLASSIC is a method to measure the quality of workmanship of a construction work based on the approved standards. QLASSIC enables the quality of workmanship between construction projects to be objectively compared. QLASSIC assessment is performed by qualified and independent assessors, through site inspection. The quality of workmanship of a construction work is assessed according to the requirement of the relevant standard and marks are awarded if the workmanship complies with the standard. These marks are then summed up to calculate the QLASSIC Score (%) for a construction project. Construction works that are rectified after an assessment will not be re-assessed. Assessment samples are determined prior to carrying out the assessment.

Construction Industry Standard (CIS 7:2006 – Quality Assessment System for Building Construction Work) specifies requirements on quality of workmanship and assessment procedures for building construction work. The requirements in CIS 7 are divided into four main components:

1. Structural Work
2. Architectural Work
3. Mechanical and Electrical Work (M&E) Work
4. External Work

CIS 7 also specifies the sampling guideline and the weightage allocated for each component according to the category of building.



Checking squareness of internal wall



Checking fall of floor in wet areas



Checking hollowness of internal wall



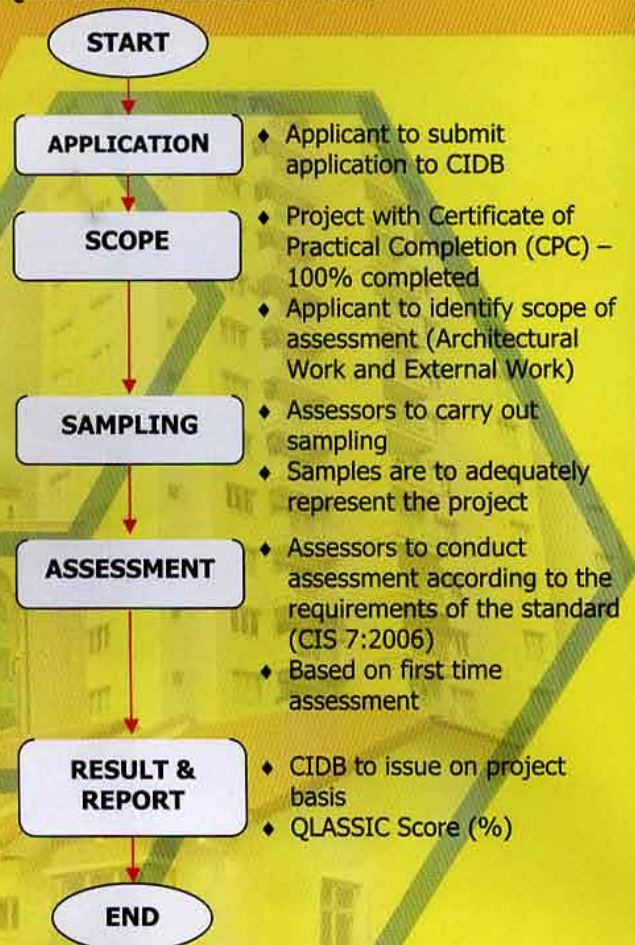
Checking hollowness of tiled floor

- No charges for assessment and processing fee for the time being.
- Enables you to benchmark the quality of workmanship of your construction project.
- Provides you a standard assessment system for quality of workmanship of construction work.
- Enhances quality control of your construction work
- Specified as a quality criterion for contractor's performance score-card.

Who should apply for QLASSIC assessment?

- Projects owner
- Real estate and housing developer
- Contractor
- others

QLASSIC Assessment Process



For further information or to download the application form, please visit our website www.cidb.gov.my

Please contact us should you need further clarification:

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DO THINGS RIGHT THE FIRST TIME AND EVERY TIME

Building Index Malaysia to leaders of the building and construction industry, and received full support and encouragement. In the same month, the Association of Consulting Engineers Malaysia accepted PAM's invitation to join the Committee, and to jointly develop the rating tools.

With the individual Committee Members' knowledge and experience with green building ratings, the Committee went straight to work and formed two separate drafting teams headed by Ir TL Chen for non-residential development, and Ar Chan Seong Aun for residential properties respectively.

During the period between August and November, members of the Committee have visited Building and Construction Authority of Singapore that certifies Singapore's Green Mark, and Green Building Council Australia that certifies Australia's Green Star. We thank Mr Tan Tian Chong, Director of Technology Development of BCA Singapore and Ms Trudy-Ann King, State Manager of GBCA for Victoria, South Australia and Tasmania, for sharing their experiences of Green Mark and Green Star respectively with us.

While in Melbourne, the Committee also held technical discussions with Professor Emeritus Allan Rodger of University of Melbourne, and Professor Roger Fay of University of Tasmania. Allan is an advisor on sustainable architecture and sustainable cities, and recently participated in the creation of "Melbourne Principles for Sustainable Cities", and Roger had co-developed the "National Australia Building Environmental Rating System" for the Department of Environment and Heritage Australia.

All four of them are here to participate in this Forum, and will also join a Consultative Meeting hosted by PAM later today with Malaysian experts including Prof. Dato' Ar Elias Salleh and Associate Professor Dr Faridah Shafii.

In early November, PAM also had the opportunity to share the concept of Green Building Index Malaysia at the Asia Congress of Architects in Busan Korea, with possible collaboration with country or organisation that may have similar intention.

By December, the two drafting teams have completed their rating schemes for both residential and non-residential respectively, and tested them on actual projects. PAM and ACEM had since also finalised the formation of a joint Green Building Index Accreditation Panel that will oversee the assessment for Green Building Index Malaysia.

After today's preview, and having considered the feedback from the industry and the public, we target to officially launch Green Building Index Malaysia in early April.

Green Wave

Over the last few months, as PAM and ACEM worked on Green Building Index Malaysia, we have often been asked whether Malaysia property market is ready for the green wave.

International experience has shown that green building rating tool plays a critical roles in greening the property market, and judging by the response that we have received for today's forum, we are ready.

Ar Boon Che Wee, Deputy President, PAM Convener, Green Design Forum



Senator Penny Wong receiving a token of appreciation from Ar Boon Che Wee

Speech by PAM President BEYOND GREEN RATING



Ar Lee Chor Wah

Senator the honourable Penny Wong Minister Climate Change and Water, Australia, the Acting High Commissioner Andrew Ford, Presidents and representatives of allied professions, industries and government agencies.

Distinguished guests, members of the media,

Ladies and gentlemen,

A very good morning and welcome to the Green Design Forum and the preview of Malaysia's Green Building Index.

In around June or July last year, PAM received a request from a developer to jointly research and develop a green rating for Malaysia. PAM took up the challenge and felt that it would be better for the professionals to do it by themselves. Dr Tan Loke Mun volunteered to lead the sustainable committee, probably out of his guilt to atone for all the damages he had done to the environment! A committee was formed. The idea of a Malaysia green rating system was mooted with BIPC and we got their support. Experts from ACEM like TL Chen and Looi were co-opted into the committee. Instead of reinventing the wheel, we thought it might be more effective in learning from Singapore and Australia. Singapore because they are our immediate neighbours. Australia because of our personal connections dating back to our student days there, and the CH2 Building in Melbourne.

Through Interface Carpets' Ray Anderson – an inspiring green industrialist, I met one of Tan Tian Chong's staff. And through AutoCAD and BCA's sustainable seminar, I got to meet Tan Tian Chong, the Director of BCA Singapore for Green Mark. Tian Chong was very kind and gracious in sharing with us their Singapore experience. And we were surprised to learn that it was started by just about 5 people when we were told by SIA it could have been 50! That gave us hope as we are small and unlike BCA, we are not funded by a rich government.

Through Dr Tan's contact with Prof Allan Rodger, another early pioneer of the green movement in Australia, we were connected with Trudy-Ann, the chairperson of Australia's Green Building Council for Tasmania, Victoria and South Australia. The committee then went to Australia in November last year and visited a number of green buildings such as the famous CH2 Building there.

Through these studies, we learned that Singapore had adopted a top down system where it is mandatory by law for buildings to be green rated. While in Australia it was private sector driven and not compulsory. And in Malaysia, we think we will end up something in between.

All this means that through the sharing of knowledge, insights and first hand interactions with designers, legislators, building managers and end users, our committee had accelerated our

learning process so that we could target to launch our rating system by April this year and for you to preview it today.

Today, as we celebrate this historic event in soft launching our green rating tools, I think, to be truly green, we must go beyond just green rating of buildings.

As architects, it is important that we contribute in the green movement by designing greener buildings for the future. However if we are serious about taking care of the environment, we may be surprised to know that, just 3 areas of our life contribute to 75% of the environmental damages. They are, in order of priority:

1. the food we eat
2. how we travel
3. the water and energy efficiency of our houses and gardens

I learned this from a book "Green is Good-Smart Ways to Live Well and Help the Planet" by Rebecca Blackburn, another Australian.

It is hard to believe but true. The book suggests that we could save more of the world, and faster, simply by not eating meat than through designing green buildings. She says that eating 3 kilogrammes less red meat (i.e about 5 meals of steak) is equivalent to reducing household water use by half! Congratulations to all the vegetarians in the audience. You have done a lot more in greening the earth than what we are just starting to do.

In 1969 Buckminster Fuller, the architect, engineer, inventor, philosopher wrote a book called "Operating Manual for Spaceship Earth". I first heard about Bucky in the 70's when Lim Chong Keat got him to build a Geodesic Dome in Penang's famed Komtar. 2 weeks ago while in Sydney for a holiday, I chanced upon Bucky's book. As I started reading it, I wished I had read it much earlier, I wished many of us had read it much earlier.

In the book, Bucky investigates the great challenges facing humanity, and the principles of avoiding extinction. And he talks about how "to make the world work for 100% of humanity in the shortest possible time through spontaneous cooperation without ecological offense or the disadvantage of anyone". And how to use innovative design to create technology that "does more with less" thereby improving our human lives.

Today, sadly, Bucky's thoughts are even highly promoted by some motivational training programmes but not the design communities. Let's re-learn from Bucky how we could guide our "Spaceship Earth" toward a sustainable future.

In order to promote and test our tools we are also in the process of signing MOU's with foreign and local universities in encouraging the students to use the Malaysian Green Building Index in their projects. In Australia, we are talking to University of Tasmania through Prof. Roger Fay, another pioneer of green design. And in Malaysia, we are talking to UPM and USM, both with eminent green advocates, like Dato' Prof. Ar Dr Elias etc.

Today, we want to thank the Malaysian Sustainable Building Committee for graciously agreeing to work with PAM and ACEM on this rating project. And we are happy to announce that the protem committee for the Malaysia Green Building Council was officially formed at PAM Centre just last night. And Dr Faridah who was the president of the previous Malaysian Sustainable Building Committee was elected as the president of this new Protem Committee. Congratulations to the Protem Committee, and we hope the committee could get the approval from ROS before the launch of the Malaysian Green Building Index in April this year.

For an event like this to happen, we have many people to thank. First, we want to thank Penny Wong and her family members and friends, who got us connected. We want to thank the sponsors, Johnson Suisse and Bluescope Steel for financing this event. The media for the coverage and publicity. Dr Tan and his Sustainability Committee members. Boon for coordinating the event while most of us were away on Christmas and year end holidays. ACEM, MSBC, BIPC, the Australian High Commission, PAM Secretariat and all those involved, including you the audience for making this event a reality.



Guests at the Green Design Forum

Let me now introduce our very special guest to you. As we all know, Penny Wong was born in Malaysia and moved to Australia when she was eight.

You can find her illustrious biography in the internet.

Penny Wong was a lawyer in Adelaide and worked as an adviser to the Carr Government in New South Wales before she entered the Parliament.

She was elected as a Labor Senator for South Australia in November 2001 and began her term in July 2002.

In December 2007, Penny was appointed to the Federal Cabinet in the new Rudd Labour Government as the Minister for Climate Change and Water.

Penny is responsible for the co-ordination and implementation of the Government's climate change and water policies including the design and implementation of the Government's Emissions Trading Scheme. And today she's going to talk to us on "Moving to a Lower Carbon Future – Perspective from Australia". Ladies and gentlemen, please welcome Penny Wong.

Ar Lee Chor Wah, PAM President

Keynote Speech “Moving To A Lower Carbon Future - Perspective From Australia”

by Senator The Honourable Penny Wong, Minister For Climate Change And Water, Australia, At Green Design Forum



It is a great pleasure to be here. This is my first speech as Australian climate change minister in Malaysia. I accepted this invitation because I am a lawyer and now obviously a politician. We have a lot of architects in our family. It is a bit worrying when you speak to an audience with your family members who know far more than you about the subject matter.

I was thinking and considering what I would say, what can a minister from Australia say to an audience of Malaysian architects who know much more about architecture than she does. The answer to that probably lies in considering two things: the first is, what place architecture can have and does have in influencing how we live, how we interact and how we view the world. Second: to consider and to comprehend the scale of climate change, its ongoing effect and growing effect on all of us.

In relation to the first issue, I did ask about the place of architecture and I am sure there are those in the audience who know more about the philosophical understanding of architecture than I do. I asked my younger brother over dinner last night, how he would explain about what architecture is, what is important about it. One of the things he said that architecture is not just about how it looks, how things look, but how you experience it. I thought that was an interesting thing to say because what he speaks of is the notion about the way the space influences our behavior, how it influences our interaction with each other and with the external world, with our environment.

If we think about it, about the legacy you live as an architect, the decision you make today affects and influences so much in the years to come, in terms of how our building operates, how our house operates, what is its carbon foot print looks like, what is its energy efficiency looks like, the broader urban design issues around transportation, wastes and so forth.

You can choose for example to ignore the energy uses of relevant considerations when you design your buildings; many people don't. But I think what is important is to recognize when you are making these decisions, you are in fact making decision not just about today but about tomorrow and tomorrow. You are making decisions about energy requirements about that dwelling, that commercial space into the future for many years to come.

We know the topic of this seminar, sustainability and green buildings, is the issue that governments and communities around the world are increasingly concerned with. That is demonstrated by many governments and many nations and also by the work that PAM is undertaking.

One reason why the building sustainability is high on the agenda is that communities, businesses and governments are seeking solutions to climate change because this is one of our most pressing global challenges. Why should you care about climate change? I have a very simple answer to that and may be I don't need to explain it to this audience. But the reason architects should be clear about the climate change is because we all have to, we all should.

In governments, there is always a policy area which you can identify as being areas specific – social policy, environmental policy and economic policy. Then there are some areas of government policy or there are some issues which have genuinely the capacity to affect the structure of our economies, the way which we live our lives as well as our environment. And climate change is one of those, and increasingly the world is becoming aware of this.

If there is anyone in the audience who doubts the scale of what we are confronting, I really invite you to consider 3 things: the first is to read the summary of inter-governmental panel on climate change report which concludes unequivocally that the world is warming, and unequivocally that human beings are contributing to that. It paints a really stark picture of what awaits. It is not so much on this generation although we are already experiencing it but those who are to come. It tells us what could happen if we allow the climate change to continue unmitigated. The second fact I want to quote is from the UK. That 11 of the 12 hottest years in history have all occurred in the last 12 years. 11 of the 12 hottest years in recorded history.

In Australia, the way which most Australians understand the climate change is in my other portfolio, which is the portfolio of water. One of the areas I am responsible for is the Murray-Darling basin which is the largest river system in Australia. In the year we were elected, the two years prior to that with the lowest two years of inflow into the Murray-Darling and they were 43 percent lower than the previous low. We continue to set new low in terms of inflow, historic low with an enormous steep down in rainfalls as a result of climate change. What is most frightening about is, it is precisely what the scientists told us would happen as a result of climate change. So just in that, my portfolio was spending about 12 billion Australian dollars trying to restructure that aspect of Australian industry, that aspect of Australian geography, that aspect of Australian agriculture in order to cope with the future where we know we would have less rain.

So these are some of the reasons why the Rudd Labour Government takes climate change so seriously. The first official act of Prime Minister Kevin Rudd after being sworn in was to ratify the Kyoto Protocol and we have to find our policy approach to climate change based on 3 pillars: The first, we now have to reduce the Australia's green house gas emission, we are on a very high per capita a meter. Australia needs over time to reduce its emission and to restructure its economy to enable us to do that. The second is we have to adapt to the climate change we cannot avoid. The third is we have to help develop a global response.

On 15th of December the Prime Minister announced our emission trading scheme which we called the Carbon Pollution Reduction Scheme. What is that? This is a scheme which will enable us for the first time to place a cap on the amount of emission our economy produces. We will issue permits up to the level of that cap. Those permits can be traded. This scheme would be central to the way which Australians will make its obligations to reduce our green house gas emission. There are a lot of technical issues associated with the scheme, but I just want to take a step back to reflect on what we are actually doing. Because until now, what we have done is we have poured carbon dioxide, another green house gas emission into the atmosphere without any regard for the cost and without any limit. But we know there were costs and we are starting to pay them. Those costs are reflected in the climate change that we are seeing and would be increasingly borne by our children and by our grandchildren.

This scheme is in effect seeking to trap at least a proportion of the cost of climate change into the economic transaction that we make today. Instead of pretending and operating on the illusion that there was no cost to green house gas emission, now we have to input some of the cost into the economic decisions today whether they are in consumption, production or investment. We have to try and recognize the cost of climate change in the economic decisions we make today.



Ar Dr Tan Loke Mun
Immediate Past President of
PAM and Moderator of
"Review of the Green Building
Index Malaysia"



Ir Chen Thiam Leong
Past President of AGEM and
Panelist "Green Building Index
Malaysia" (Non-residential)



Ar Chan Seong Aun
Council Member of PAM and
Panelist "Green Building Index
Malaysia" (Residential)



Ms Trudy-Ann King
State Manager Vic/SA/Tas
Green Building Council of Australia



Prof Roger Fay
Head, School of Architecture
and Design, University of
Tasmania

That is the scheme we are proposing to introduce. If the government is able to achieve the result through parliament, it will ensure that we start this scheme in 2010 and it would transform the Australian economy for the first time for the cost on green house gas emission which would encourage major polluting industry to lower their emission. We will use the fund that we gain from the scheme through the auction of permit to help the most emission intensive industry transition to a lower pollution in the future. We will use the fund to assist the household because the scheme would mean the Australian households would pay more for energy. We have a substantial assistance program in place to ensure families are not being asked to bear the full burden of the change for climate change. Finally it would drive investment into renewable energy. It would be matched by the government's policy to drive further investment into renewable energy including our target of achieving a 20 percent renewable energy in Australia by 2020.

We have made a number of commitments to meet our international obligations. That ranged from reduction in green house gas emission of -5 to -15 percent by 2020, which given Australia's very high per capita emission, given our highly coal intensive industry, it would be a significant reduction. For example -15 reduction of 2000 level for Australia, would mean Australia have to reduce its per capita emission that is how much green house gas emission for every Australian by 41 percent between 1990 and 2020. That would require a revolution in our energy sector because one of the core things Australia has had of comparative advantage is access to a very large quantity of relatively cheap coal and what we need to do is to change over time our energy mix.

We believe we can deliver on this reduction without compromising the need to maintain economic growth. The economic modeling that the Government has done through the Australian treasury demonstrates that not only Australia but the world can continue to prosper, can continue to grow while cutting our green house gas emission. The reality is that now we in Australia contribute, I think some 1.5 percent of the world's emission. Ultimately the future of all of us, and the legacy we leave for the next generation in terms of climate change will be determined by what agreement can be reached between all the nations of the world. This by definition is a global problem; it requires a global solution to respond to it.

Let us now turn to buildings for a moment, and just to say this: putting a price on carbon through our emission trading scheme, would draw a lot of behavior change. It would start to mean that in terms of consumption decision, Australian would start to reflect the cost of climate change. It would mean those goods and services which contribute more to climate change would cost relatively more for the first time. But there is something the price on carbon would not completely alter, would not completely fix. So we now have other policy, what we call complementary policy to drive this sort of policy change, and one of the areas with that is in the built environment. We know that we do need complementary measures to drive changes in the way we build buildings, the way we design buildings, because lower carbon price would drive incentives to pursue more efficient use of energy. That is not always going to be sufficient in terms of design decisions that are made by people like yourselves, as well as future tenants and other end-users.

So improving building energy efficiency, for a range of reasons, sounds both economically and environmentally good. For example in the Australian context alone, the Centre for the International

Economic reported that for an efficiency gain from the Australian building sector alone, could increase our Gross Domestic Product by approximately 38 billion dollars annually. At present our built environment is responsible for approximately 20 to 23 percent of our green house gas emission based on our recent figure. So the root cost of saving begins by thinking about energy efficiency early. Analysis by our building code boards shows that expenditure on the energy saving measure outlined in the Australian building code is repaid almost five times in saved energy costs.

As previously discussed, if you are aware of our green star rating, builders and building owners can voluntarily have their building assessed for energy efficiency and for environmental credentials. The green star rating system recognizes that the energy efficiency of a building should be considered at the outset of a building lifetime, and the time to think about the sustainable building is at the design stage. This really reiterates what I said earlier, to understand, as I am sure all of you do, the legacy that you leave as architects in terms of the carbon footprint, the sustainability of the buildings that you designed.

To complement the efforts of the building council, the Government is implementing a range of policies. Green Business Australia is an initiative which would provide assistance to small and medium size businesses that are developing green building materials, by providing grounds to cover up to a third of the cost of these projects. We have also implemented minimum energy performance standards for buildings and plants. This means new houses, new electrical plants must comply with a base level of efficiency. And that of course, save us energy.

We are also looking at ways for homes to use clean, renewable energy. One of the policies that we were elected with, was increasing the energy renewable target. This is a legislative target which requires wholesale operators in the electricity sector to purchase a proportion of energy through retail use from renewable sources. Currently there is a very low percentage of it. Our policy is to increase that to 20 percent by 2020. That is a massive four-fold increase in Australia's renewable energy over decades. What we want to have happened is to have drive investment in cleaner forms of energy such as wind. We already have that in my home state in South Australia, quite a bit of wind energy, but we also need investment in areas such as wave, particularly in West Australia where it is ongoing.

And geothermal, which is one of the most exciting new energy sources, even if it is underground, tapping into the hard rocks which lie beneath the earth surface with thousands of degrees centigrade and tapping that energy into steam turbines for instance. There is a lot of research going on in the northern part of South Australia desert and that would provide, if we are able to deploy and commercialize, access to clean base load energy. At the moment much of the world base load par and Australia's base load par, comes from coal which is highly carbon intensive. We cannot achieve major reduction in our energy use, in our green house gas emission, unless we change our energy mix. Geothermal is obviously one option. Solar thermal is another technology Australia is putting a lot of money into and a lot of resources into. And finally there is carbon capture storage. I am going to talk just briefly about this.

Carbon capture storage is a way to hold carbon that is produced when you burn coal. This is sometimes a controversial issue among



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Ir Gurmit Singh
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Dato' Ar Haji Esa Haji Mohamed
Past President of PAM



Datuk Ar P Kasi
Past President of PAM



Prof Allan Rodger
Emeritus Professor,
University of Melbourne

some environmental movements. What I always say about that is this: in a foreseeable future, certainly in a lifetime of everybody in this room, the major source of energy around the world, both in the developed and more importantly in the developing economy, would continue to be coal because it is cheaper. So if we are serious about tackling climate change then humanity has no choice other than to try and find a lower emission technology for coal. We cannot achieve the objective of sustainable development plus reducing our green house gas emission over time, unless we find a lower emission technology for coal. That is why the Australian Prime Minister has put his weight behind the global carbon capture storage institute, so there is a hub for the world to work on developing carbon capture storage technology because we all need it now and into the future.

The Australian Government is also putting in place what we call our solar cities program. This is a program which combines solar energy efficiency as well as market reform to lay foundation for a sustainable energy future. On this program we are trailing in Australian household, Australian industry, Australian energy governance, energy companies, ways in which we can reduce green house gas emission. Urban sites are selected to receive grid-connected solar technology to try new sustainable model for electricity supply and electricity use.

The major policy challenge came up in the discussion just prior to me coming here today, is of course the legacy of the existing building. What is it that we do with those buildings which have already been constructed, which are not energy efficient, which are not order efficient, which are not sustainable. I think one of the major policy issue ... We can fix two things in terms of built environment: we can get all of you designing sustainable building that deals for the future, but we also need to address the legacy of our existing housing stock, our existing commercial stock. The question is: who would bear the cost of that?

Certainly what we do in Australia is looking at different ways to retrofit, try to improve the efficiency of the existing stock. We provide substantial assistance to businesses through a green building fund which is looking at improving the energy efficiency of the existing buildings. So this is the competitive and merit base grant program, aiming to reduce our green house gas emission by reducing the energy consumed in our offices and commercial space. We also provide direct assistance to Australian households. For example we have a solar hot water rebate program, which would assist around a quarter of million Australian households, which will enable them to install solar and heat pump hot water system in their homes to replace the very green house intensive hot water. We have a solar home and community plan which provides cash rebate to the installation of photo-voltaic system on homes and on community buildings. We also have the green loan program, which provides reduced interest finance to households implementing energy saving measures.

One of the other things we want to do is to improve people's capacity to actually measure and manage their own energy use and their green house gas emission. We develop a program whereby Australian household would be able to access a high quality and subsidized expert assessment of their home energy and water use. One of the thing when I am traveling around Australia, people often say to me they would like to know more about what they can do, what they should switch off, what are the plants they should have to

make their home more energy efficient. So we are working to enable a tailor made assessment, subsidized assessment for Australian households to enable them to do that. This would also enable the Australians to receive assistance in a number of areas, and they will immediately enjoy the water and energy assessment provided. Most importantly household will understand that more changes can make such an enormous difference in terms of saving energy and water.

To conclude, I want to talk a little bit about your green building index and to say how impressive it is, that your undertaking is, to congratulate PAM on the work and those participated in the works. I asked Chor Wah beforehand what drove this. He said it is the end-users. Quite a number of your end-users were asking for this sort of rating system, this sort of sustainability measure. Can I say it is also for architectural user because you do have such an enormous responsibility to finish where I started which my brother was talking about that architecture is not just how it looks but how it is experienced. So many of the decisions you make will have implications for the energy use of those places, whether commercial or residential, in the years to come. So you do have the capacity now to shape so much of the sustainability factors in the years to come. There are some professions where we really operate on a much smaller time frame; you operate genuinely on longer time frames. You have the capacity to influence into the future far more than many of us, sometimes, arguably, perhaps more than some politicians; depending on the politicians.

It is very important we consider that because one of the things that is most difficult about climate change policy is this: Most voters, most populations, most electorates think about the present and that's reasonable – We want to make sure our children go to school, we are set up financially, we can put food on the table, we have shelter and so forth, we want to improve the lives for our children and grandchildren. We genuinely focus on the present. This is a policy area where these politicians and our government have to introduce to the Australian people: We are asking you to do something today – to pay more for your electricity, to pay more for certain goods and services in the hope that this would reduce the costs for the next generations. That is a very difficult thing sometimes for politicians to ask of people, to ask people to do something today that would cost them more in the hope that it will improve something for those who come after us. But it is that kind of inter-generational issue that in fact is present everyday in the work that you do; and you can make choices about what it is you bequeath to the next generations; and what it is you try to convince your clients to do in terms of achieving that responsibility. You have an opportunity to make sustainable living practices directly relevant to the individuals that you are working with.

In reality, it is climate change and the efforts that we all are making around the world towards the sustainable living and low carbon economy – these will increasingly cause a revolution in the way we live. They will require innovative ideas, pragmatic solutions and most of all, a willingness to look beyond the present. It demands that you design not just for today but with an awareness of tomorrow.

So I congratulate you on your green building index and its launch. I commend you for it. It has the potential to make a significant contribution not just to climate change but also supporting that very important thing, which is continuous and sustainable economic development. And wish all of you every success. Thank you very much for your hospitality today.

Building Advisory Urges People to 'Go Green' in New Year 2009

Architect Centre's Statement on Green Design Forum

2009 is a perfect time to go Green especially in terms of cost-savings through improving energy efficiency, reducing wastages while making a positive contribution to the environment and society.

Ar Anthony Lee Tee, an accredited building inspector with Architect Centre, the building advisory service of the Pertubuhan Akitek Malaysia (PAM), which has over 60 architects registered with it, has urged both businesses and households to factor in a well-thought-out strategy to adopt the soon to be launched Green Building Index Malaysia. He also hopes that decision makers in both sectors will seriously consider making the necessary adjustments to their properties, such as retrofitting with newer, more efficient energy-savings technologies. However, emphasis should be to dutifully maintain buildings, which could save owners up to 30 per cent of costs for repairs.

"This year is going to be a tough one for most of us," says Ar Anthony. "We are facing a global financial meltdown and effects of environmental backlash, that we need to change our priorities to proactively improve on our existing buildings, especially old buildings for sustainable use."

"In light of this, we have to think of the future and what we, each one of us individually, can do to reduce the negative impact of carbon emission and inefficient use of energy in our cars, offices, factories and homes," he adds. Consumers are starting to make better choices in almost every aspect of our lives, the way we buy and use everyday things, our lifestyles and our consumption that will contribute to preserving our natural resources and sustainability. Going Green goes beyond just being trendy; Going Green is saying, "I can make changes to save money and our environment at the same time."

GREEN RENOVATION

Going Green says "Recycle, Reduce and Reuse" and these 3 simple steps we can embrace within our homes, offices, cars and factories.

"More people are also opting to renovate their existing homes, in the hope of upgrading them and increasing the quality and value of their properties. It is vitally important to incorporate the best energy-savings technology and innovative designs to their homes," says Ar Anthony. "We encourage people to seek the professional advice of Architect Centre-accredited Architects to professionally plan and implement their renovation processes. This can save them a lot of money now and in the future. It will also ensure their homes are better suited to energy saving, improving overall efficiency and being geared for the future. So even if they plan on selling their houses in the future, it will significantly increase the selling price. Perhaps even by as much as 10-15 percent."

GREEN TECHNOLOGIES

This principle applies directly to the commercial sector as well, where operational costs are an important consideration. With government incentives to implement green technologies in industries and homes, it will be a smart thing to get expert architectural advice to improve the overall operational efficiency and quality of their properties in areas of innovative sustainable design, passive cooling, natural ventilation and environmental considerations; and working in collaboration with engineers in areas of electrical, air-conditioning, water and hot water systems.

Although Malaysian buildings may lag behind many countries like Singapore and Australia, energy efficient lamps (e.g. T5 Fluorescents tubes and electronic ballasts) are available locally to reduce electricity bills. Larger Mixed Developments may opt for highly efficient Central District Cooling for central air-conditioning systems. Heat re-circulating pumps can be integrated-designed into air-conditioning systems to re-cycle heat to produce hot water. Smaller scaled developments can benefit from Inverter technology/ variable speed drive systems (VRV) air-conditioning systems also available locally. Waste water recycling and rain harvesting are simple recycling techniques to reduce water consumption. Collectively these cost and energy efficient systems will enhance business efficiency; it will help add that extra boost to a business.

Architect Centre's architect provide a wide range of architectural services, including design, renovations and structure-related advice across Malaysia.

"The service of Architect Centre architects to do a thorough inspection, provide effective design and renovation advice, and improve energy usage, is very reasonably priced," explains Ar Anthony. "We find that people save significant amounts of money and headache by following such professional advice."

CONGRATULATORY MESSAGES FOR GREEN DESIGN FORUM

"The Green Design Forum was a good event. Please include me in your future event. I also would like to offer myself in assisting PAM in the development of the GBI."

- Prof. Dr Mohd Hamdan Ahmad, Deputy Dean, Faculty of Built Environment, UTM

"Congratulations on the very well organized forum. I look forward to attending future forums/seminars pertaining to the Green Movement. I would like to be more active in the GBI committee, as I had the prior experience on the Green Mark Scheme during the design development stage for the STI building in Putrajaya. I would gladly support any future undertaking by GBI committee."

- Shai Samsuri, Hamiltons International Pte Ltd

"We are embarking on a project that I would like to insert a clause into the need statement on complying with the Green Building Index."

- Ar Zurainaleily Awalludin, Public Works Department

"I attended the Green Design Forum on the 3rd January 2009 and found it very interesting."

- Ar Dr Abdul Malek Abdul Rahman, USM

"I would like to congratulate PAM and ACEM for developing a green building rating system for Malaysia. I attended the Preview of Malaysia Green Building Index on 3 January 2009 I am really happy to see that Malaysia has finally developed our own rating index."

- Ar Kong Seng Yeap, PAM member

"... PAM are to be congratulated on extremely efficient administration of this (and many other aspects of the whole exercise). I hope all continues to go well with the Green Building Index project."

- Professor Allan Rodger, University of Melbourne

"Thank you for the invitation to participate in the Forum and discussions at the PAM Centre. I think you and your colleagues have come a long way in a very short time. Fortunately, you have the opportunity to learn from the successes and failures of others."

- Professor Roger Fay, University of Tasmania

"Congratulations on the successful organization of the Forum - what a turn-out. I wish your team great success in the launching and implementation of the Green Building Index in April 2009."

- Tan Tian Chong, Director of Technology Development, BCA Singapore

"... It was a great forum so well done."

- Trudy-Ann King, State Manager, GBCA for Victoria, South Australia & Tasmania

I was very pleased to read of the work you are doing on the Malaysia Green Building Index when I was in Malaysia in January this year. I have close personal ties to Malaysia and believe that the steps you are taking will be hugely important to guiding Malaysia's continued development in the years ahead.

- David Goatman, Senior Manager, Olympic Sustainability

Courtesy Visit to Majlis Perbandaran Subang Jaya (MPSJ)

28 November 08 • MPSJ



Representatives from PAM and MPSJ



From left En Mohd Yusoff Ghazali, Ar Lee Chor Wah and Ar Sarizal Yusman Yusoff

The courtesy visit was attended by Ar Lee Chor Wah, Ar Sarizal Yusman Yusoff, Ar Chan Seong Aun, Ar Alvin Lim, Ar Erdayu Os'hara Omar, Ar Abdul Halim Suhor, Ar Hjh Nor Aini Juffery, Ar Khor Peng Chin and Ar Yew Kuok Chuan. En. Mohd Yusoff Ghazali, Timbalan Yang DiPertua chaired the discussion on behalf of Yang DiPertua. The other MPSJ's representatives were En Suhaimi, En. Norjafni Zainuddin, En. Hazman Mahayuddin, En Azmi Rosli and Puan Azlina Mat Salim. En Mohd Yusoff informed that YDP was unable to attend the discussion due to a meeting with the Menteri Besar.

The issues discussed were as follows:

1. Standardising of the OSC Procedures

Ar Lee Chor Wah informed that PAM is in contact with MHLG on OSC matters. The MHLG has taken note of feedback / comments submitted by PAM. MPSJ informed that they have 2 meetings in a month with JKR, Syabas and TNB to ensure OSC runs smoothly.

MPSJ informed that starting from 1 December 2008, MPSJ would start an online application for OSC where the consultants could submit the application online. It would be fully implemented with effect from 1 January 2009. As this is a new procedure and would take time to make architects familiar with it, PAM requested MPSJ to organise a forum for the architects.

On the other hand, since different local authorities interpreted and implemented the OSC and CCC in their own ways, PAM would like to organise a forum to explain the details of the procedure. All local authorities will be invited to attend the forum.

2. Delivery System Process

MPSJ informed that they faced problems when the developer wanted to change the architect. MPSJ requested PAM to look into the matter. PAM informed that the change of architect is under the purview of LAM. PAM informed that the developer / owner may request the letter of release from the first architect, and if the architect refused, the developer / owner may write to LAM stating all the reasons to request from LAM for the letter of release. On the other hand, the developer / owner would also be able to forward the matter to the Court.

3. Certification of Completion and Compliance (CCC)

MPSJ hoped architects will take initiative to obtain information from the Ministry of Housing and Local Government from time to time as the architects are the responsible persons in issuing the CCC.

On the renovation made by the house owner not according to the actual plan, MPSJ requested PAM to look into it. PAM replied that this matter involved public awareness. Public are not aware that if the renovation made was not according to the plan, the insurance

will not cover for fire. PAM added that the banks are needed to be informed that when they received an application for loans, they must ensure that the plan has been approved by the local authorities and according to the by-laws.

MPSJ informed that starting from July 2008, the developer must pay deposit to Syabas and TNB in order to obtain the "Surat Sokongan". PAM informed that the Ministry of Housing and Local Government has a clear guideline on this.

4. Planners Issue – application of planning permission by architects

PAM informed that PAM and MIP are in the midst of discussion to produce a clear guideline on what architects and planners could submit to the local authorities for application of planning permission. PAM hoped that when the guideline is concluded, all local authorities including MPSJ would have a clear guideline on accepting the planning permission. PAM highlighted its position that architects can submit plans and documents for the application of planning permission as gazetted under the current legislation.

5. Other matters

a) Local Plan / Local Structure

PAM would like to be invited to contribute should MPSJ review the local plan / structure plan in the near future.

b) Sustainable Cities

PAM proposed to co-organise design competitions in order to create vibrant cities to the society. MPSJ welcomed the idea and would request Jabatan Perancang to assist.

c) Traffic conditions along LDP during peak hours (8.00am – 9.00am & 6.00pm – 8.00pm)

MPSJ replied that there is not much they could do to reduce the traffic conditions. Users are advised not to follow the Summit route if they wish to avoid the traffic.

d) Schedule for implementation and construction of linking bridge between Bandar Puchong Jaya (behind Tesco) and Taman Industri Subang

MPSJ informed that they were ready with the design, but the construction is pending due to the cost. MPSJ added that there are many projects under the "Perancangan Tempatan", awaiting for the budget to be approved. Now MPSJ are focusing to improve the management of garbage, lamps and landscape.

PAM thanked the Timbalan Yang DiPertua for hosting and chairing the discussion. PAM offered its assistance to MPSJ whenever required.

Executive Summary of The Minutes of the Fifth Meeting of PAM Council 2008-2009

16 January 09 • PAM Centre, Kuala Lumpur

PAM and the Association of Siamese Architects (ASA) agreed to jointly undertake a publication on Indo-China Architecture. Sabah Chapter would assist with the publication.

PAM proposed to participate only in **UIA activities** critical to PAM's and Malaysia's issues which are: Sustainability; Vision and Strategy; Professional and Practice; Statute and Bylaws; and Urban Planning.

Council approved the list of applications for PAM Membership as follows:

Corporate Membership Ang Wen Hsia, Chai Si Yong, Cheong Kah Yi, Haslina A. Shukor, Hoo Voon Fong, Jamaludin Mohamad Nor, Khairul Hisham Abdul Rahman, Lau Ming Ngi, Leong Gian Wen, Lim Jak Shen, Lim Lee Hock, Lim See Heing, Looi Mun Kit, Looi Wan Choong, Low Wei Choon, Lye Wei Khang, Norazila Ariffin, Safariyanti Mario Mahamud, Seow Ling Lee, Siti Azurah Mohd Ghazali, Fabian Tan Kean Beng, Tan Lih Yan, Josephine Tan Pei Tze, Teoh Siew Choo, Thang Suh Chee, Yap Kim Yee, Zamry Zakaria **Graduate Membership** Saadon Mohd Yusof, Ahmad Ridhuan Zainal, Ong Kam Chiong, Ting Ying Ying, Mohd Rozi Mohd, Adzhali Harun, Nadzryan Faqrul Mohd Nawawi, Zamri Ali **Student Membership** Mohd Hazwan Hamidi **Reinstatements** Ar Ahmad Farid Baharuddin, Ar Malcolm Koh Ho Ping, Ar Muharram Dja Radjeman, Mokhtar Mohamad Akhir, Ar Phua Seok Kwang Resignation Chan Wai Kin, Lim Cheng Kooi.

Council agreed to the proposal on the **Green Building Index Accreditation Panel (GBIAP)**, Certifiers and Facilitators.

Council agreed **GBIAP** should comprise **4 Professional Architects** appointed by PAM and **3 Professional Engineers** appointed by ACEM. The following names were appointed by Council: Ar Lee Chor Wah (Chair of GBIAP), Ar Chan Seong Aun, Ar Serina Hijjas and Ar Dr Tan Loke Mun.

GBI would be incorporated into the **Malaysian students' course work** for training at the educational stage. University of Tasmania, Universiti Putra Malaysia and Universiti Sains Malaysia agreed in principle to PAM's proposal.

Council agreed to appoint the following in the **Board of Directors of Architect Centre**:

President Ar Lee Chor Wah (by position) *Honorary Secretary* Ar Saifuddin Ahmad (by position) *Council Member* Ar Chan Seong Aun *Corporate Member* Ar Mohammad Shah Dato' Sanad.

PAM Northern Chapter was working with the Penang State Government to review the **Local Plan**.

PAM Northern Chapter would organize 2 seminars: **Green Building** by Ar Assoc Prof Dr Abdul Malek and **Qlassic** by Ar Chan Seong Aun.

PAM Southern Chapter would organize a visit to Iskandar Malaysia, Nusajaya, tentatively on 13 February 2009.

PAM Sabah Chapter requested PAM to send 2 speakers to **Sabah Housing Conference** in June 2009. The topics are on Property Inspection Services and Green Building Index Malaysia.

The **Sabah Architecture** book would be launched in March 2009 during **IPEX 2009**.

80 booths were secured to date for Building Trade Show (BTS). The **PAM Sarawak Chapter** targeted to secure 100 booths.

Courtesy Call to **YB Dato' Sri Wong Soon Koh, Sarawak Minister of Environment and Public Health**. Among the issues discussed at the ministry were: Building Submission Checklist; Representation of Professional Bodies in Local Councils; Service Delivery in Local Councils; and Submission of listed heritage buildings.



Council meeting in progress



Front left Ar Sim Sie Hong, Ar Erdayu Osiara Omar, Ar Zulhemlee An and Ar See Kim Piow

Awards and Competitions Committee proposed the following to be the judges at **UIA International Competition - MaxMix Cities: Celebration of Cities 3**: Dato' Ahmad Fuad bin Ismail (Mayor of KL), Ar Lee Chor Wah (PAM President), and Ar Boon Chee Wee (Deputy PAM President).

The CPD Committee proposed to invite local authorities to speak on the **procedure for submissions of projects** to authorities. The first session would be by DBKL.

Council agreed not to print **handouts for CPD seminars** in 2009 but posts them in PAM's website. Participants could download the notes for their reference.

PAM would not use **online resource centre database** but would subscribe relevant journals which could be posted on the website.

Heritage and Conservation Committee would organise a **photography contest on heritage buildings** to be exhibited at Archidex09.

Council decided PAM should support the **Malaysian Services Exhibition 2009 (MSE 2009)** in Dubai but would not send a representative.

Council agreed for an MOU between PAM and **Ikatan Arsitek Indonesia (IAI)**.

The date for **AGM** was proposed on 22 August 2009 and for the **Annual Dinner** on 3 October 2009.

The Committee proposed to organise the annual **PAM Members Night** on 27 February 2009 with the theme "Masquerade".

PAM Sustainability Committee would organize **seminars on Green Design**, beginning with the first one on MS1525 on 14 February 2009.

480 participants attended the first session of **Green Design Forum** while 450 attended the second session in the afternoon.

Courtesy Visit to Putrajaya Corporation

9 January 09 • Putrajaya Corporation



Ar Lee Chor Wah, PAM President and YBhg Tan Sri Samsudin Osman, Putrajaya Corporation President with the respective representatives

The courtesy visit was attended by Ar Lee Chor Wah, Ar Saifuddin Ahmad, Ar Chan Seong Aun, Ar Abdul Halim, Ar Erdayu Os'hara Omar and Ar Jasmin Kamarudin. The meeting was chaired by the President of Putrajaya Corporation, YBhg Tan Sri Samsudin Osman. Other representatives were Tn Hj. Ir. Mohd Ridzwan K. Othman, Pengarah Jabatan Pembangunan Bandar, En. Omairi Hashim, Pengarah Jabatan Perancangan Bandar, Pn Hjh Ar Norhayati Abdullah, Timbalan Pengarah, Bahagian Pembangunan Kemudahan Awam, Jabatan Pembangunan Bandar, En. Shamsul Bahrin Rahmat, Timbalan Pengarah, Bahagian Kawalan Bangunan, Jabatan Perancangan Bandar and Pn Sateerah Hassan, Ketua Penolong Pengarah, Unit Rekabentuk, Bahagian Kemudahan Awam, Jabatan Pembangunan Bandar.

The issues discussed were as follows:

1. Transportation

The connectivity between the government buildings is poor. Although a monorail system has been proposed and parts of it started earlier, it will not solve the problem. PAM proposed PjC to build a proper transportation system e.g. electric tram system should be explored as has been successfully done in Melbourne and Vancouver, the most livable cities. PjC informed that they are in the midst of upgrading the transportation system with approved budget more than RM1 million.

2. Planners Issues – application of planning permission by architects

PAM informed that PAM and MIP are in the midst of discussion to produce a clear guideline on what architects and planners could submit to the local authorities for application of planning permission. PAM hoped that when the guideline is concluded, all local authorities including PjC would have a clear guideline on accepting the planning permission. PAM highlighted its position that architects can submit plans and documents for the application of planning permission as gazetted under the current legislation. PjC confirmed that they will follow the guideline.

3. Green Building Index Malaysia

PjC confirmed its support on the Green Building Index Malaysia (GBI) initiated by PAM and ACEM. PAM would work together with PjC to promote GBI and make buildings in Putrajaya as an example.

4. Boulevard

The main boulevard which is iconic is unfriendly and unshaded, maybe due to the trees have difficulties to grow fast. PAM suggested to PjC to design covered pedestrian walkways connecting the buildings. Interspersing some active retail outlets and el fresco dining between the buildings may liven up the boulevard, ala Champs Elysee or La Ramblas in Barcelona. PjC informed that they wished to implement it, only a matter of time.

5. Joint Competition

For future projects in Putrajaya, PAM suggested PjC to co-organise design competition with PAM. PjC informed that Putrajaya Holdings is now holding competitions for their non-government buildings.

6. Other matters

PAM would like to encourage Architects working with PjC to join PAM, as PjC's Architects could play active roles in PAM.

berita akitek

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