



JANUARY 2010

warta MGBC

Malaysia Green Building Confederation

WMGBC 0001/01/2010

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events >>

FEBRUARY

**Repeat Session-
Incentives & Benefits Going
Green By GBIsb**
10 February 2010
Wednesday 3pm - 5.30pm
Function Room, PAM Centre

**Repeat Session-
Incentives & Benefits Going
Green By GBIsb**
24 February 2010 Wednesday
3pm - 5.30pm Function Room,
PAM Centre

MARCH

**MGBC 2010
Annual General Meeting**
6 March 2010
Saturday 9 am - 12.30pm
Sime Darby Convention Centre,
Bukit Kiara, KL.

MGBC Official Launch
10 March 2010
Wednesday 9 am - 12.30pm
Sime Darby Convention Centre,
Bukit Kiara, KL.

**Repeat Session-
Incentives & Benefits Going
Green By GBIsb**
10 March 2010
Wednesday 3pm - 5.30pm
Function Room, PAM Centre

**Repeat Session-
Incentives & Benefits Going
Green By GBIsb**
24 March 2010
Wednesday 3pm - 5.30pm
Function Room, PAM Centre

editorial >>

A NEW GREEN RENAISSANCE

With the coming of the year 2010 and the year of the Tiger , it is only apt that we launch our newsletter to mark the new beginning for Malaysia Green Building Confederation (MGBC). As you may well know MGBC is Malaysia's own Green Building Organisation which is a part of the World Green Building Council (WorldGBC), which we hope to join the ranks of others such established GBCs such as the USGBC, UKGBC, GBCA and such.

Though 2010 , in the global context, opened to the lack lustre performance of the Copenhagen 2010 Climate Change Summit (COP10) and divided support from the world leaders but Malaysia has witnessed our Prime Minister made pledges for credible cuts to our Carbon emissions. A truly brave and hopeful gesture among the nations of the World. With buildings and construction contributing approximately 40% of our carbon emissions it is very timely that we have launched Malaysia's own Green Building rating tool in 2009. Following this impetus there is a huge momentum for the launch of the MGBC in March of this year.

You too can support MGBC by participating in the organisation. Warta MGBC welcomes contribution from members who would like to share their writings in the form of articles and research papers. We hope that many more will support the green building effort in Malaysia and bring about a new green renaissance.

AR SARLY ADRE SARKUM

*Chief Editor &
Chairman of Marketing Media and Publishing Committee*

membership >>

As of 30th January 2010, MGBC member breakdown is as follows:

Professional Members -	67
Corporate Members -	35
Associate Members -	7
Academic Members -	5
Institutional Confederation Partners -	7
Industry Confederation Partners -	14
Student Members -	1

Article >>

GREEN BUILDING PROJECTS – WHAT FEES TO CHARGE FOR GBI SERVICES?

IR. CHEN THIAM LEONG



Introduction

One of the most persistently asked questions by GBI Facilitators (during their 3-day training workshop) has always been – What fees to charge for GBI building projects?

The GBI Accreditation Panel (GBIAP), had at the onset of developing the GBI, preferred not to set any scale of fees for rendering GBI Facilitator services but rather to let the market find its own level. After all, LEED and Green Mark systems have already come ashore and the respective fees for LEED Accredited Professional and Green Mark Manager services are also left to the market forces.

However, following relentless requests, GBIAP had advised that as a broad guide, the GBI Facilitator (GBIF) fees would be about 10 times the GBI registration fees depending on the project size and rating level sought. That this guide will probably be superfluous knowing the attitude of (majority) local developers should not be surprising. It is no secret that local developers had never subscribed to the mandatory scale of fees imposed by the respective Professional Boards. Therefore, the reality would be that they will continue to pay peanuts for monkeys whenever they can. Only the serious developers (and

they are increasing in numbers) will appreciate paying a fee commensurate with the expertise and service rendered. Others (which unfortunately comprise the majority) will likely opt for green-washing as all they are interested in, is chasing for green points so that their projects are perceived not to be left behind (and more importantly qualify for the 10th MP Incentive scheme). This sad state of affair is of course a two-way shortcoming, duly abetted by those professionals who are in the game for its financial returns only, with professionalism (and passion) a very distant second. As for government agencies that pay the full fees but fail to receive the full service - the problem of its mismatched procurement policy is another story for some other time.

You do have a choice

Since the launch of GBI in May 2009, the author has received numerous cynical feedbacks that the introduction of GBI has caused consultants to do extra work with no additional remuneration. The claim that certain developers forced them to do it and they have no choice, is akin to the failure of Energy Efficient (EE) designs to take off hitherto, when engineering consultant's fees are based on a percentage of the engineering installation costs where the more you do will mean the less you get. The simple examples would be designing for natural ventilation or natural lighting where the M&E consultant gets no fees (or reduced fees). That EE designs have not been promoted is therefore not surprising due to the disincentive to spend on time consuming EE designs. Thus over the years, the majority of our local designs have

deteriorated to 'bread and butter' or 'cut and paste' outputs.

The need for the industry to wake up to a new mindset is absolutely crucial if we want to realize our green building agenda. The GBI has been conceived to address prevalent local bad habits by requiring Commissioning Specialists to provide Enhanced and Post Commissioning services, conduct Verification of Performance, and plan for Sustainable Maintenance - without which EE and truly Green Buildings will not materialize. It is time for the professionals to say NO if they are not going to be remunerated for the additional services to be rendered and which will benefit the project immensely. Developers who are unwilling to pay have the option of continuing to build their preferred low quality development.

Be competitive and profitable

Meanwhile, how can design firms make green design profitable in an extremely competitive market? Green building projects can generate additional revenue and incomes if firms are willing to adapt. One key to profitability is to know how to set fees for green projects.

Fee arrangements for green build-ing projects recognize the shift, for example, of the M&E engineer's role as part of an integrated design team. This higher degree of integration during the conceptual design stage demands active involvement from all participants. The challenge for M&E design firms is to maintain full participation from the architect, owner, and others and still remain profitable.

As the green building industry rapidly moves towards the mainstream of design, the challenge for firms not currently involved in designing green buildings is to adapt to maintain market share. Firms need to gain the experience and expertise to contribute to efficiently design green buildings. A consultant with a demonstrated expertise in green design often will receive the commission based on the value brought to the team.

To overcome the modus operandi of the local consulting practice, it will be prudent to provide GBI Facilitator (GBIF) services separately from the conventional M&E scope (or architectural scope depending on who wants to provide GBIF services). If the

design team is experienced with green buildings then the GBIF fees can correspondingly be lowered. It must be appreciated that proper and full GBIF services commence at the onset of design through construction (during which stringent monitoring is required) right till 12 months after the project completion, to provide verification for final GBI certification.

Therefore, contrary to certain naïve comments from the market, it is not a simple 'non technical' administrative service. Of course, similar to conventional consultancy services, the range of GBIF expertise can also vary substantially, and it is for the discerning developers to choose smartly and in accordance with their affordability and/or priority.

Project Understanding

The first step in evaluating an opportunity is to conduct a basic go/no-go decision process. Factors such as the relationship with the client, market sector and workload are elements considered. Try to work with design teams that have demonstrated an ability to be efficient and hence, profitable in traditional and green projects. Endeavour to work repeatedly with the same team so that as the number of completed projects increase, the whole team becomes more efficient and profitable.

Green design for some types of projects may present particular challenges. Institutional projects generally are the easiest to design green because the owners

Table 1: Recommended GBIF Scale of Fees (New Construction)

Item	Total Construction Cost (RM)						
	Start	End	Cost Range	Min Fees	% on Add	Max Fees	Overall %
1	0	10,000,000	10,000,000	0	0.400	40,000	0.40
2	10,000,001	50,000,000	39,999,999	40,000	0.350	180,000	0.36
3	50,000,001	150,000,000	99,999,999	180,000	0.250	430,000	0.29
4	150,000,001	300,000,000	149,999,999	430,000	0.100	580,000	0.19
5	300,000,001	500,000,000	199,999,999	580,000	0.075	730,000	0.15
10	500,000,001	above		730,000		Negotiable	

Notes

Recommended Fees exclude Optional Services such as;

- 1) Commissioning Specialist services at onset of project until GBI Verification Assessment;
- 2) Post Occupancy verification and re-commissioning to suit tenancy fit-outs;
- 3) Detail energy modelling based on dynamic hourly analysis for GBI Gold and Platinum;
- 4) Daylight simulation modelling;
- 5) CFD modeling

In a nut shell, the above tabulated fees are applicable to provision of basic GBIF services for;

OTTV and RTTV analysis
 Static Energy Analysis
 Running Charettes (limited to 3 sessions)
 Develop design with design team and advice on 'green' costs
 2 reports, one for each stage (concept and detail design)
 Review of tender design and documentation
 Site briefing, documentation and monitoring
 Building User Manual Documentation
 Building occupant survey
 All works pertaining to submission to GBI

invariably consider the big picture through life-cycle analysis. Market driven projects are generally the most challenging because the budgets are set razor thin and additional construction funds required for green features that increase quality, are often a struggle to obtain.

Projects with short design time frames such as design-build projects or developer driven commercial projects complicate the integrated design process. Projects with compressed design cycles tend to have decisions based on first cost rather than long-term value. Fees should allow for additional life cycle costing exercises to justify green choices.

Experienced / Inexperienced Design Team Members

The architect's green design experience (or the lack of) impacts the level of effort to reach the final design. Experienced green architects know many of the viable green strategies for particular building types and avoid common mistakes that can cause delays when examining options. If the architect is inexperienced, then the GBIF (together with other design team members) will have to provide a higher degree of leadership.

Institutional (and hopefully in future, governmental) clients often dictate green building certification for their projects. Owners strongly committed to the process or those who have previously developed green buildings understand that full fees and the provision of key additional services (including GBIF) are required to ensure success.

Beware of architects and consultants chasing green projects with cut-rate fees, as you may get dragged into a low fee project unwittingly. Only reduce fees with good justification such as a reduction in scope (but which must be within the realm of the law). A knowledgeable client or owner recognizes that teams require reasonable fees to deliver high value.

Setting the Fee

For the M&E consultant, the most important principle in setting his design fees for green buildings (and most would argue for conventional projects as well) is not to base the fee on the M&E construction cost. This is because, energy modeling input (additionally carried out by the GBIF) early during the concept and schematic design process, optimal building massing and orientation, and a

high performance envelope will yield a building with significantly smaller mechanical/electrical systems than conventional designs. The mechanical/electrical cost savings are transferred into the high performance envelope and passive environmental systems. It is hence, not uncommon in green buildings for HVAC initial costs to be reduced by as much as 30% to 40% of conventional systems and for the buildings to consume half the energy of their contemporaries. Basing fees on projected or actual M&E construction costs cannot support the level of design effort to attain these results. It is strongly encouraged that M&E fees be based on the total construction cost for green buildings and even for conventional buildings.

Apart from the 'unreasonable' owner, inexperienced architects may also ask or expect an experienced M&E consultant to help lead the team along the sustainable design path and possibly even facilitate the GBI charrettes. Under such circumstances, the M&E consultant should learn to say NO and suggest for a GBIF to be appointed separately.

With the GBI offering credit points for a Commissioning Specialist, there will likely be debate as to who should do this enhanced commissioning scope. For those consultants that market this service, it is a valuable source of revenue and an excellent way to cement a permanent relationship with the owner. Align your scope of work with the owner's wish and certification requirements and determine the effort involved.

Example

A good way to illustrate how to charge for GBIF services is by an example. Some consultants (or owners) may feel that some of the services highlighted in the example as additional services should be part of the base M&E fees. If this is the case, then the M&E fees should certainly be increased



Above: Actual GBI Plaque for certified buildings

to include them. It is important to make sure that the services are identified and covered by the fees.

The project is a high rise office tower with a GFA (excluding car park) of 45,000 m². The GBI registration fee is RM32,000 (Note that this fee is inclusive of Design Assessment and Completion & Verification Assessment by the GBI Certifier). The approximate construction cost is RM120m.

GBI Facilitator Scope of Services:

Charrettes

Provide facilitation of three sustainable design charrettes, (involving at least 2 staff). The number of charrettes can vary from project to project. Multiple charrettes are common with institutional clients.

Basic Building Envelope Analysis and BEI calculations

Conduct preliminary energy studies that include shape analysis, building orientation, envelope optimization and system selection with simple life-cycle analysis on limited options. The basic energy analysis generally is whole building analysis but with a large number of general assumptions. It determines building energy use of various system or envelope components using parametric analysis so that individual components can be optimized. Use manual calculations or static simulation software for GBI Certified or Silver rating, and separate subsequent dynamic simulation software for GBI Gold or Platinum rating.

GBI Design Assessment (DA)

Lead Design Team in submission to GBI to for GBI Design Assessment to obtain provisional GBI rating, including presentation and attending review sessions with the designated GBI Certifier.

GBI Construction Monitoring

Assist Design Team to brief Construction Team on GBI rating requirements during the construction process. Assist and

advise on construction methods in line with GBI requirements. Monitor construction site activities and document for compliance with GBI. Assist and Advise on Testing and Commissioning needs. Lead Design Team to prepare Building User Manual for GBI Completion Assessment. Upon completion of construction, lead Design Team and Contractor to prepare submittals for GBI Certifier to conduct Completion Assessment.

GBI Completion & Verification Assessment (CVA)

Within 12 months after Completion or upon 50% tenancy occupation, whichever is the earlier, lead Design Team to collate all Energy consumption records and conduct Tenant Comfort Survey, for submission to GBI Certifier to verify building performance for issuance of final GBI certification.

GBI Appeal Application

If the provisional GBI rating or final GBI rating accorded is not satisfactory, and the owner wish to file an appeal, then lead the Design Team to document the justification of the appeal.

Proposed GBIF Fees

The proposed fees would be in the range of RM300,000 to RM350,000 (refer Tables 1 & 2) depending on the green experience of the Design Team members and the level of GBI rating desired.

If GBI Gold or Platinum is targeted, then Dynamic Energy simulation needs to be conducted and are separately chargeable at up to RM50,000 per simulation. Should credit points for Commissioning Specialist be desired, such an appointment shall be separate with additional fee in the range of RM200,000 to RM300,000 depending on the experience of the Design Team members and the full scope of works.

Conclusion

It is the author's fervent hope that those opting to provide GBIF services will do so professionally, and not go fee-washing with green-washing deliverables. Deal with serious building owners who appreciate the value for money to engage GBIF services. Collectively and in general, the professionals have short-changed themselves in the past, opting to give fee discounts rather than provide better valued services. It is time we change our mindset and help ourselves to do justice to our professionalism.

Acknowledgement

This article incorporates extensively, contents from the paper on "Setting Fees for Profitable Green Building Projects" by Tim McGinn, P.Eng., Member ASHRAE



Above: The GEO building, certified under GBI on 24th July 2009.

Announcement >>

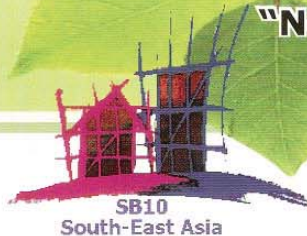
CALLING FOR ABSTRACTS & REGISTRATION www.mgbc.org.my/sb10sea

Conference on Sustainable Buildings South-East Asia (SB10SEA)

"New Green Opportunities & Challenges"

Kuala Lumpur, Malaysia

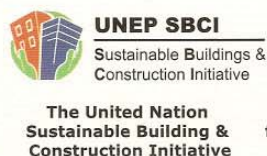
4th - 6th May 2010



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- ◆ TRADESHOW ON SUSTAINABLE BUILDING & CONSTRUCTION
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- ◆ TECHNICAL TOUR: GREEN BUILDINGS & DEVELOPMENT AROUND KUALA LUMPUR & PUTRAJAYA
- ◆ SUSTAINABLE BUILDING DESIGN COMPETITION
- ◆ AWARDS FOR BEST PAPERS
- ◆ NETWORKING DINNER

For details and updates refer to www.mgbc.org.my/sb10sea

ABOUT SB10SEA

The Conference on Sustainable Building South-East Asia (SB10SEA) is organised by The Malaysia Green Building Confederation (MGBC), in collaboration with Institute Sultan Iskandar of Universiti Teknologi Malaysia, under the auspices of the United Nations Sustainable Building and Construction Initiatives (SBCI, UNEP), The International Council for Research and Innovation in Building & Construction (CIB) and The International Initiatives for a Sustainable Built Environment (iISBE).

SB10SEA is one of the regional conferences taking place around the world in 2010 as a prelude to The World Conference on Sustainable Building, SB11 in Finland. The theme "New Green Opportunities and Challenges" provides a platform for stakeholders to:

- discuss emerging issues, trends and solutions for reducing buildings impacts upon the environment and climate change;
- enhance the awareness of sustainable building issues and share local and regional knowledge with the broader international community;
- enhance the network of South-East Asian experts on sustainable buildings and construction for future co-operation.
- provide South-East Asian input on sustainable building issues into the next World Conference on Sustainable Buildings (SB11) Finland, 2011.