NEW GBI INCENTIVES UPDATES & GREEN COST CALCULATION

29th Mar 2016
PROCEDURE

- Submission of Green Cost can only proceed after GBI CVA certificate is issued.

- Green Cost submissions must be endorsed by the respective qualified professionals (Ar, Sr and Ir)

Is there any template submission document?
Qualifying **Capital** Expenditure (QE) submission

1. Overall Summary of QE/Green Cost comprising the 6 GBI Criteria
2. Breakdown Summary of each Criteria
3. Appendices to support each breakdown item
Template for Green Cost Submission

Qualifying **Capital** Expenditure (QE) submission

1. **Overall Summary** of QE/Green Cost comprising the 6 GBI Criteria
2. Breakdown Summary of each Criteria
3. Appendices to support each breakdown item
<table>
<thead>
<tr>
<th>No</th>
<th>GBI NRNC CRITERIA</th>
<th>Capital Expenditure without Green Cost RM</th>
<th>Capital Expenditure with Green Cost RM</th>
<th>Qualifying Expenditure RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EE</td>
<td>5,068,900</td>
<td>12,581,300</td>
<td>7,512,400</td>
</tr>
<tr>
<td>2</td>
<td>EQ</td>
<td>1,000,400</td>
<td>3,452,700</td>
<td>2,452,300</td>
</tr>
<tr>
<td>3</td>
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<td>920,800</td>
</tr>
<tr>
<td>4</td>
<td>MR</td>
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</tr>
<tr>
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<td>WE</td>
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<td>1,037,600</td>
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<tr>
<td>6</td>
<td>IN</td>
<td>7,400,000</td>
<td>15,939,400</td>
<td>8,539,400</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>20,266,000</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We certify that this cost is in accordance with the terms of the GBI guidelines:

_________________                  ________________________                ______________________
SR QQQQQQQQ                                     AR XXXXXXX                                          IR M&EM&E
Qualifying **Capital** Expenditure (QE) submission

1. **Overall Summary of** QE/Green Cost comprising the 6 GBI Criteria

2. **Breakdown Summary** of each Criteria

3. Appendices to support each breakdown item
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Criteria</th>
<th>Capital Cost without Green RM</th>
<th>Capital Cost with Green RM</th>
<th>Qualifying Expense RM</th>
<th>App</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Energy Efficiency (EE)</td>
<td>EE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Sunshading Devices</td>
<td>EE1</td>
<td>0</td>
<td>492,400</td>
<td>492,400</td>
<td>A1</td>
</tr>
<tr>
<td>1.2</td>
<td>Low-e glazing</td>
<td>EE1</td>
<td>1,218,700</td>
<td>2,900,400</td>
<td>1,681,700</td>
<td>A1</td>
</tr>
<tr>
<td>1.3</td>
<td>Aerated Bricks</td>
<td>EE1</td>
<td>201,400</td>
<td>469,400</td>
<td>268,000</td>
<td>A1</td>
</tr>
<tr>
<td>1.4</td>
<td>BAS (incremental only)</td>
<td>EE1</td>
<td>0</td>
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<td>A1</td>
</tr>
<tr>
<td>1.5</td>
<td>Photo &amp; Motion Sensors</td>
<td>EE2</td>
<td>0</td>
<td>585,400</td>
<td>585,400</td>
<td>A1</td>
</tr>
<tr>
<td>1.6</td>
<td>Digital Power Meters</td>
<td>EE3</td>
<td>160,800</td>
<td>758,100</td>
<td>597,300</td>
<td>A2</td>
</tr>
<tr>
<td>1.7</td>
<td>Variable Speed Drives</td>
<td>EE5</td>
<td>0</td>
<td>1,277,800</td>
<td>1,277,800</td>
<td>A2</td>
</tr>
<tr>
<td>1.8</td>
<td>High EE Chillers</td>
<td>EE5</td>
<td>3,488,000</td>
<td>3,989,200</td>
<td>501,200</td>
<td>A2</td>
</tr>
<tr>
<td>1.9</td>
<td>Thermal Chw Plant Ctrl Sys</td>
<td>EE5</td>
<td>0</td>
<td>465,900</td>
<td>465,900</td>
<td>A2</td>
</tr>
<tr>
<td>1.10</td>
<td>High EE Motors for:</td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Chw pumpsets, CTs (incr only)</td>
<td>EE5</td>
<td>0</td>
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<td>80,200</td>
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<tr>
<td></td>
<td>AHU (incremental only)</td>
<td>EE5</td>
<td>0</td>
<td>121,700</td>
<td>121,700</td>
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<td></td>
<td>TOTAL C/F</td>
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<td>7,512,400</td>
<td></td>
</tr>
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<td>Item</td>
<td>Description</td>
<td>Criteria</td>
<td>Capital Cost without Green RM</td>
<td>Capital Cost with Green RM</td>
<td>Qualifying Expense RM</td>
<td>App</td>
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<td>------</td>
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<td>Energy Efficiency (EE)</td>
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<td></td>
<td></td>
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<td>0</td>
<td>465,900</td>
<td>465,900</td>
<td>A2</td>
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<tr>
<td>1.10</td>
<td>High EE Motors for:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We certify that this cost is in accordance with the terms of the GBI guidelines:

_________________                  ________________________                ______________________
SR QQQQQQQQ                                     AR XXXXXX                                          IR M&EM&E
Template for Green Cost Submission

Qualifying **Capital** Expenditure (QE) submission

1. Overall Summary of QE/Green Cost comprising the 6 GBI Criteria
2. Breakdown Summary of each Criteria
3. **Appendices** to support each breakdown item
We certify that this cost is in accordance with the terms of the GBI guidelines:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Crit</th>
<th>Base Cost</th>
<th>Green Cost</th>
<th>BQ</th>
<th>QE</th>
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<tbody>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base</td>
<td>Green</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.1</td>
<td>Nil Perforated Sheet for sun shade</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>860</td>
<td>460</td>
<td>395600</td>
<td>LA:3</td>
</tr>
<tr>
<td>1.1a</td>
<td>Nil Hori Fin</td>
<td>EE1</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<td>400</td>
<td>96800</td>
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<td>9.38 mm Laminated Clear Glass</td>
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<td>m²</td>
<td>7283</td>
<td>161</td>
<td>1172563</td>
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<td></td>
<td>7283</td>
<td>376</td>
<td>2738408</td>
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<tr>
<td>1.2a</td>
<td>9.38 mm Laminated Clear Glass with ceramic frit</td>
<td>EE1</td>
<td>m²</td>
<td>265</td>
<td>161</td>
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<td></td>
<td>265</td>
<td>598</td>
<td>158642</td>
<td>VO5</td>
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<td></td>
<td>Sub-total for Item 1.2 – Low-e Glazing</td>
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<td></td>
<td></td>
<td>1681700</td>
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</table>

SR QQQQQQ AR XXXXXX IR M&EM&E
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<td>1.10</td>
<td>High EE Motors for:</td>
<td>EE5</td>
<td>0</td>
<td>80,200</td>
<td>80,200</td>
<td>A2</td>
</tr>
<tr>
<td></td>
<td>Chw pumpsets, CTs (incr)</td>
<td>EE5</td>
<td>0</td>
<td>121,700</td>
<td>121,700</td>
<td>A2</td>
</tr>
<tr>
<td></td>
<td>AHU (incremental only)</td>
<td>EE5</td>
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<td>121,700</td>
<td>121,700</td>
<td>A2</td>
</tr>
<tr>
<td></td>
<td>TOTAL C/F</td>
<td></td>
<td></td>
<td></td>
<td>7,512,400</td>
<td></td>
</tr>
</tbody>
</table>
## BREAKDOWN SUMMARY

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Criteria</th>
<th>Capital without Green</th>
<th>Capital with Green</th>
<th>Qualifying Expense</th>
<th>App</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Innovation (IN)</td>
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</tr>
<tr>
<td>6.1</td>
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<td>7,914,400</td>
<td>A6</td>
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<tr>
<td>6.2</td>
<td>UV Lights for AHUs</td>
<td>IN1</td>
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<td>570,000</td>
<td>570,000</td>
<td>A6</td>
</tr>
<tr>
<td>6.3</td>
<td>Condensate Water Recovery</td>
<td>IN1</td>
<td>0</td>
<td>55,000</td>
<td>55,000</td>
<td>A6</td>
</tr>
<tr>
<td></td>
<td>TOTAL C/F</td>
<td></td>
<td>7,400,000</td>
<td>15,939,400</td>
<td>8,539,400</td>
<td></td>
</tr>
</tbody>
</table>

We certify that this cost is in accordance with the terms of the GBI guidelines:

_________________                  ________________________                ______________________
SR QQQQQQQQ                                     AR XXXXXX                                          IR M&EM&E
Eg of Green Cost for GBI Gold

• Total Construction Cost = RM 227,800,000
• Approved QE = RM 20,266,000
• QE/Green Cost = 8.9%
• Thermal Storage Sys = RM 7,914,400
• QE without TES = RM 12,351,600
• Green Cost without TES = 5.4%
Does **green** pay off (in Malaysia)?
- Non-Residential Buildings -
  projected data by Ir TL Chen (not verified:2009)

<table>
<thead>
<tr>
<th>Green Building Index Rating</th>
<th>Average M’sian Bldg</th>
<th>Meets MS1525</th>
<th>GBI Certified</th>
<th>GBI Silver</th>
<th>GBI Gold</th>
<th>GBI Platinum</th>
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</thead>
<tbody>
<tr>
<td>BEI kWh/m².year</td>
<td>250</td>
<td>200 - 220</td>
<td>150 - 180</td>
<td>120 - 150</td>
<td>100- 120</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Energy Savings %</td>
<td>Base</td>
<td>10 - 20</td>
<td>30 - 40</td>
<td>40 -50</td>
<td>50 – 60</td>
<td>&gt; 60</td>
</tr>
<tr>
<td>Incremental construction cost %</td>
<td>Base</td>
<td>1 – 3 (0 – 3)* (0 – 3)*</td>
<td>5 – 8 (1 – 5)* (0 – 2)#</td>
<td>8 – 12 (3 – 8)* (1 – 3)#</td>
<td>12 – 15 (5 – 10)* (3 – 5)#</td>
<td>&gt;15 (6 – 13)* (5 – 8)#</td>
</tr>
</tbody>
</table>

* Denotes revised projection in 2011
# Available real data up to 2014
Who is authorized to verify and/or certify these costs?
## Income Tax Allowance

### Signatories for submission

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>RNC / NRNC</th>
<th>INC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Submission</td>
<td>Ar</td>
<td>Ar or Ir (C)</td>
</tr>
<tr>
<td>All Costs except M&amp;E items</td>
<td>Sr</td>
<td>Sr</td>
</tr>
<tr>
<td>Costs for M&amp;E items</td>
<td>Ir (M or E)</td>
<td>Ir (M or E)</td>
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</tbody>
</table>
# Income Tax Allowance

## Signatories for submission

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>NREB¹</th>
<th>NREB²</th>
<th>NREB³</th>
<th>NREB⁴</th>
<th>NREB⁵</th>
<th>NREB⁶</th>
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</thead>
<tbody>
<tr>
<td>Overall Submission</td>
<td>Ar</td>
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<td>Sr</td>
<td>Ir (C)</td>
<td>Ir (M or E)</td>
<td>X</td>
</tr>
<tr>
<td>All Costs except M&amp;E items</td>
<td>Sr</td>
<td>Ar</td>
<td>Sr</td>
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<td>Costs for M&amp;E items</td>
<td>Ir (M or E)</td>
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<td>Ir (M or E)</td>
<td>Ir (M or E)</td>
<td>X</td>
</tr>
</tbody>
</table>

1 denotes the full compliment of consultants are engaged for the retrofit building  
2 denotes only Ar, Ir (C) and Ir (M&E) are engaged for the retrofit building  
3 denotes only Sr, Ir (C) and Ir (M&E) are engaged for the retrofit building  
4 denotes only Ir (C) and Ir (M&E) are engaged for the retrofit building  
5 denotes only Ir (M&E) are engaged for the retrofit building  
6 denotes only one discipline of Professional (denoted as X i.e. Ar or Sr or Ir <of any discipline>) is engaged for the retrofit building
## Income Tax Allowance

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<table>
<thead>
<tr>
<th>Cost Category</th>
<th>IEB¹</th>
<th>IEB²</th>
<th>IEB³</th>
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<td>Ir (C)</td>
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<td>Costs for M&amp;E items</td>
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<td>Ir (M or E)</td>
<td>Ir (M or E)</td>
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<td>Ir (M or E)</td>
<td>X</td>
</tr>
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</table>

¹ denotes the full compliment of consultants are engaged for the retrofit building
² denotes only Ar, Ir (C) and Ir (M&E) are engaged for the retrofit building
³ denotes only Ir (C), Sr and Ir (M&E) are engaged for the retrofit building
⁴ denotes only Ir (C) and Ir (M&E) are engaged for the retrofit building
⁵ denotes only Ir (M&E) are engaged for the retrofit building
⁶ denotes only one discipline of Professional (denoted as X i.e. Ar or Sr or Ir <of any discipline>) is engaged for the retrofit building
Can any Ar, Sr and Ir be the signatories?
Income Tax Allowance

• **Ar** denotes a Professional Architect registered with Lembaga Arkitek Malaysia and practising through an Architectural Consultancy Practice

• **Sr** denotes a Professional Quantity Surveyor registered with Lembaga Juruukur Bahan Malaysia and practising through a QS Consultancy Practice

• **Ir** denotes a Professional Engineer registered with Lembaga Jurutera Malaysia and practising through an Engineering Consultancy Practice

• **Ir** (M or E, C) denotes Professional Engineer of Mechanical or Electrical, or Civil discipline
New Incentive Schemes

1. GITA (PROJECTS) for GBI buildings
   [Green Investment Tax Allowance]

2. GITE (SERVICES) for GBIF & CxS companies
   [Green Income Tax Exemption]

EFFECTIVE 25/10/13 - 31/12/20
Income Tax Exemption (Services)

Income tax exemption of 100% of statutory income from the year of assessment 2013 until the year of assessment 2020. The company must comply with the conditions stated in the approval letter.
Eligibility Criteria

For a company which undertake green technology services activities, the company must meet the criteria of green services as follows;

a) At least one competent / qualified personnel in green technology;

b) Must have a green policy related to environmental/sustainability; and

c) 100% income must be derived from green technology services
Note:

• Competent person is defined as holding a certificate of competency as a service provider in the related field of green technology

• Green Policy is a statement about the commitment to sustainability and environment management by the company
Qualifying Activities

Green Building
Services related to testing and commissioning of green building equipment and system, and services related to green building design and consultancy services
Income Tax Exemption

Qualifying Date

However …….

Eligible companies must be registered or operationalized after 25\textsuperscript{th} October 2013 !!