

# Proposed Strategy for GBC Activities 2003-2005

## A. Background

At the April meeting of the IFC in Torino it became obvious that certain issues would have to be resolved if the GBC process is to continue during the 2003-2005 period. The following excerpt from the minutes of the meeting summarizes the issues:

*Many countries that have been participating for some time and have their own assessment or rating systems are having difficulty rationalizing continuing participation in the GBC process. In most countries this has been supported as "research" work and it is difficult to argue that, after 6 years, it is still research. On the other hand, countries that have more recently joined the process, and who, for the most part, don't yet have systems, are very keen to keep the process going and are keen to learn from countries with more experience.*

*There seems to be 3 categories:*

- *Countries who will attend only occasionally;*
- *Countries who will attend all the time and participate in the full GBC process;*
- *Countries with a desire to continue to do R&D, likely focused on developing a simpler system than the current system and perhaps also on incorporating existing buildings operations.*

*USA expressed desire to get out of this process a set of global indicators that everyone could agree to and that could be used to inform national systems. It was noted that there is a European project to develop indicators (CRISP & PRESCO – 20 countries) and that the two processes could work in a synergistic way.*

*There are several features that distinguish GBC from other efforts. These include the punctuated events that showcase efforts and participation by many countries, and the work on the sustainability indicators. Issues that have not been adequately addressed include the connection of buildings to their infrastructure and their regions, including commuting transport implications, and renovations and historical structures.*

*These research issues may be a theme of the next (2005) conference*

*It was decided to set up a sub-committee to prepare a recommendation on future plans. The group will include Spain, USA, Italy, France. It was also suggested that we should include representatives from countries no longer participating, such as Nigel Howard and Bill Bordass in the group. A strategy paper will be prepared by August 15 so that comments can be taken into account before Oslo. The group tentatively decided to meet in Paris during the period June 21 and 22.*

## B. New Since Torino

After the above discussion at Torino, another consideration has come to light. The CIB Commission W-100, which was launched in 1998, has reached a point where it needs to be re-invigorated, and a preliminary agreement has been reached with the CIB that this group will become a joint effort of CIB and iiSBE. The W-100 group was established to explore issues related to the implementation of performance labeling systems, and it is thus of interest to many GBC participants and, in fact, many of the W-100 members were also members of GBC. Converting this Commission to a joint CIB-iiSBE venture would not only make sense from the point of view of shared interests, and would also offer economies by being able to arrange back-to-back meetings.

## **C. Notes from Paris Meeting, June 27 & 28, 2002**

The meeting included the following representatives:

Nils Larsson, GBC Secretariat

Ilari Aho, Finland and President of iiSBE

Joel Ann Todd, USA

Andrea Moro and Mario Grosso, Italy

Philippe Duchene-Marullaz and Sylviane Nibel, France

Bill Bordass, UK

Luis Alvarez Ude and Miguel Angel Romero, Spain

Based on a thorough discussion in Paris in late June, it is proposed that the post-Oslo process should consist of several elements, beginning with several research projects, and culminating in GBC assessments. It is proposed that work should begin in the Spring of 2003, and that two technical meetings should be held each year to develop the work. The different areas of work will include the following, in approximate sequence of implementation:

### **1. Re-define Framework / mapping (Spring 2003 to Fall 2003)**

It was agreed that we should make a more clear differentiation between the GBC Framework and GBTool – the GBC Framework provides a conceptual and organizational framework for building assessment, as well as potential criteria and measures to populate the framework, whereas the GBTool is just one application of the framework for specific project assessment. It should be re-emphasized that our work on the larger framework has useful applications that extend far beyond GBTool assessments, providing a reference source for countries developing assessment systems and researchers seeking to improve building performance measurement. The group agreed that a mapping of the Framework elements with other assessment systems and tools would be very useful. In reviewing the framework, we should take into account the work of IEA Annex 31 and recent ISO draft standards (see ISO N467 Draft 2A as provided by Sylviane Nibel).

Specific action items include:

- Consider using ISO categories / structure
- Develop framework structure
- Map overall issues, methods, tools, scope, etc.

### **2. Work on Methodology (Spring 2003 to Spring 2004)**

Following previous discussions, it was agreed that sub-groups should be established to develop research work related to several areas listed below. The results will be fed into a new version of the GBC Framework and GBTool.

Specific tasks for five separate methodology groups include:

- Selection and/or development of appropriate Indicators and Models for Design stage assessments; for Operations stage assessments; and for Micro-urban issues, including commuting transport;
- Benchmarking methodology;
- Weighting methodology.

Although the discussion began with an assumption that most work would consist of developing indicators for the *Category* level of the GBC framework, two interesting observations emerged. Users may want to dip occasionally into a more detailed level (e.g. *Criteria*), so indicators have to be developed for both levels. In other words, if the user wishes to carry out a rapid assessment of a building that has a special focus on daylighting, she may choose to use indicators at the Criterion level for daylighting issues, but revert to Category-level indicators for the rest of the assessment<sup>1</sup>. The second point is that there is an equal need to identify suitable simple predictive models that could be linked to specific Criteria or Sub-criteria.

Thus, a future assessment may consist of a mix of indicators (most at the Category level, but some at the more detailed Criterion level) and simple models.

Other observations made with respect to indicators included the following:

- The first step should be to determine under which real-world conditions indicators are likely to be needed;
- Indicators differ from criteria in the GBC framework and tool in that they *represent* an issue or condition, often without directly measuring the totality of that issue or condition; the reliability and validity of an indicator depends on its ability to represent the issue or condition accurately
- Indicators should refer to the context for which they are applicable (this applies to use of indicators for simplification – in fact, one could argue that “sustainability indicators” are NOT context specific);
- The accuracy of predictive powers of indicators must be tested and validated;
- The ability to find relevant data and the cost of doing so must be considered in selecting indicators, although the Framework might include potential indicators for which data are not currently available or feasible;
- We should also test indicators for their ability to apply to new v. renovation projects.
- A question for which no answer was given is whether we can map design features to indicators (probably not...).

Some of the work being done by other groups that should be referenced for Design indicators includes the Global Reporting Initiative (see [www.globalreporting.org](http://www.globalreporting.org)); CRISP (see <http://crisp.cstb.fr>) and the Performance Metrics initiative being undertaken by DOE in the USA (Joel Ann Todd may provide some summaries). For Operational indicators, the work of PROBE in the UK should also be included (Bill Bordass is the main contact). For urban indicators, we should consult with Steve Curwell for BEQUEST and other related work.

#### *Benchmarking and weighting methodology.*

Work on weighting methods was initiated during GBC2002 by a work group chaired by Mauritz Glaumann, but the task is not complete. Additional effort is needed to explore more objective approaches to developing weights. It was suggested that consideration of methods for arriving at appropriate benchmarks would also be a useful research task that

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<sup>1</sup> Joel Ann Todd and Nils Larsson have had correspondence since the meeting over the meaning of Indicator v. assessment parameter, and a satisfactory differentiation remains to be made. However, we have made an attempt to start this definition here.

would help project assessment teams. Benchmarking is viewed as a valuable contribution of the GBC Framework, but it can be an onerous task for the assessment.

### **3. Further develop GBTool (Spring 2003 to Fall 2004)**

It was agreed that work on GBTool should proceed along two lines, (1) the tool should be further developed as a reference system and a re-design should take into account the work done on methodology as outlined above and (2) a simplified tool (or approaches to simplification) should be developed to make the application of the tool more feasible.

Specific tasks will include:

- Determine best software environment for GBTool & re-develop in this environment
- Consider using ISO categories / structure, reflecting changes to the Framework developed under Task 1 above
- Include indicators developed under Task 2 above as well as other methodology refinements (including benchmarking and weighting, criteria for operations and commuting transport)
- Develop approaches to simplification, such as reducing inputs based on user definition of issue coverage desired, with the user having the ability to select simple or detailed assessment

### **4. Carry out assessments (Fall 2004 to Fall 2005)**

The planning for post-Oslo work began on the assumption that certain countries would be interested primarily in R&D and would opt not to do any assessments. Discussions indicated that this may not be true, if GBTool offers a simple and effective platform to test out new methodologies. This remains to be seen, but in any case the drivers will include:

- To demonstrate the value of assessments in home countries
- To test new methodology through assessment(s)
- To raise the international profile of participating teams.

### **5. Work on Implementation issues (Spring 2003 to Fall 2005 – joint W-100 group)**

The proposal to operate the CIB W-100 Commission jointly with CIB was confirmed at the Paris meeting. The purpose of W-100 was to investigate the issues related to the implementation of rating systems as labeling programs. It is proposed to expand W-100's initial mandate to include work on the development of a revolving fund mechanism to finance initial costs of high-performance design (this point was not discussed at Paris, but it is an on-going iiSBE project that seems to fit well with W-100). Specific tasks include:

- Analyze current implementation efforts in various countries
- Identify industry needs and constraints for assessment and labeling activities
- Develop guidelines for implementation of labeling systems
- Encourage adoption of appropriate assessment tools
- Develop a revolving fund mechanism

## D. Meeting Arrangements

A major issue, in addition to establishing specific agendas for the four groups, is how to develop a scenario for meetings that would permit each sub-group to do its own work, while still allowing a cross-fertilization of ideas. An idea for such a meeting scenario is presented below.

- Day one            1/2 day for meeting of all subgroups to discuss progress and common issues  
                          1/2 day working in separate subgroups
- Day two            Full day working in separate subgroups
- Day three          1/2 day working in separate subgroups  
                          1/2 day for subgroup leaders to present progress made to all attendees
- Day four           1/2 day Public seminar for professionals in host city

It is proposed that this scenario would apply for meetings in the Spring and Fall of 2003 and 2004. As per previous suggestions, it was agreed that the Spring 2003 meeting would be hosted by Spain, probably in Tenerife. It may be logical to coordinate the Fall 2003 meeting with the planned regional event in Brazil, and the Fall 2004 event with the CIB Congress to be held in Canada. The period from Spring to Fall 2005 would then be devoted to carrying out assessments that would result in projects being presented at the SB2005 conference in the Fall of 2005.

Schedule and Tasks for GBC 2005	2003				2004				2005			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Meetings	●		●		●		●		●			● SB05
Redefine GBC Framework		■	■									
Methodology development		■	■	■	■	■	■	■	■			
Implementation issues / W-100		■	■	■	■	■	■	■	■	■	■	
Further develop GBTool				■	■	■	■	■	■			
Carry out assessments										■	■	

## E. Conclusions

Funding to achieve the objectives outlined above will not be insignificant, but participants agreed that the program may look attractive to national funding organizations. After required modifications and subsequent approval by the iSBE Board, National Teams are invited to provide comments on the extent to which they desire to participate.