

Zero Energy Commercial Buildings Consortium
Integrated Design and Building Delivery (IDBD) Working Group
Inaugural Call – March 30, 2010
Meeting Notes

Key Conclusions

- First steps for the group will be to define the boundaries of the IDBD group, especially in relation to other CBC working groups
- Another first step is to take a lay of the land to prevent duplicating efforts
- IDBD should put emphasis on process over technology
- Regarding a definition for “net-zero energy,” the focus of IDBD is more general in nature—the finer details of a definition of net-zero energy will not greatly impact the short-term objectives of this group.
 - The CBC Steering Committee will discuss and adopt a more formal definition for all the groups in the coming weeks
- At present, the group will leave splitting up into subgroups an open-ended question, contingent on responses to the co-chairs initial questions

Next Steps

- Co-chairs will develop framing questions to help understand members’ interest and expertise, key issues, and existing related efforts.
- Following that process, the chairs will create a more detailed outline and schedule working calls

Meeting Minutes

Introduction of co-chairs

Markku Allison (AIA)

Bill Sisson (UTC)

The ZECBC and 2010 Deliverables

Bill Sisson outlined the ZECBC objectives and 2010 deliverables with working objective that the IDBD feed the overall consortiums process towards a first DOE report deliverable by year end. This work product will emphasize a broader perspective on emerging technologies and cost/non-cost barriers across nine different working group areas, IDBD being one, defined by the ZECBC.

Working Group Draft Charter and Scope

Markku Allison observed that IDBD oriented objectives might put more emphasis on process rather than technology, given the nature of the design and delivery areas. Other topics within the group’s scope may include:

- Case studies
- Outcomes/optimal delivery
- Actual performance vs. design intent
- How to move design decisions and impacts earlier in the process
- How to be mindful of erosion of design intent throughout delivery

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- Standardizing the economics
- Technology catalysts for streamlining the process
- Energy modeling, BIM, requirements capture tools

IDBD Proposed Work Structure

Co-chairs will generate and pose framing questions in the coming weeks. Responses will be collected and synthesized by the co-chairs. These questions will be designed to help chairs understand the expertise and interest of members, what members view as the key and pressing issues related to IDBD, and help shape the work product and evaluate whether the group needs further segmentation to be effective.

The work engagement structure will form (calls, documents, data collection process) around the work process.

Work Outline, Approach and Timeline

- Finish structure and group identification by mid-April
- Identify primary interest areas
- Calls in May, June, July
- Drafting in August for aggregation into reports in overarching leads; deliver IDBD draft in mid-August
- Entire CBC draft deliverables are due in September to Steering Committee and DOE

Working Group Members' Role

The chairs encouraged members to actively commit and participate. To start with, members can review the charter, timelines and deliverables online.

Questions, Suggestions, and Feedback

How does the ZECBC fit into the other similar efforts underway (LBNL activity specifically mentioned)? DOE has a common program defined under ZECB that is formed by a number of sub-initiatives, such as the commercial alliances group (retail, commercial property, etc.).

- The first step of the group will be to take a lay of the land. We're not interested in duplicating efforts and certainly want to leverage other work. Members can collectively bring this knowledge to the group.
- These all tie together under a common structure in which the ZECBC effort is considered a partnering organization/contributor; but, has a certain degree of autonomy in engagement.
 - A graphical representation of this was requested.
 - Members can look at the CBC presentation slides for a good overview of this online http://zeroenergycbc.org/pdf/webinar_presentations.pdf
- Dave Hewitt mentioned another effort in which there is formed group to support a Draft Action Plan for implementing California's strategic plan on zero-energy buildings by 2030. These related efforts are areas for the ZECBC to engage and draw from in terms of addressing the expected deliverables/outputs.

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Meeting Notes

A specific “policy” related suggestion on Power Factor Correction was brought up in the context of an effective market mechanism – the question raised was where that type of suggestion fits within the overall ZECBC initiative.

- This question may be better addressed in another working group, such as the CHP, Multi-Building Systems and Grid Integration group.
- In general, the IDBD group will have many connections and interrelations with other working group areas. In these cases, IDBD will want to take note of them and try to coordinate with the other groups as possible, but not venture too far away from this group’s focus. Information sharing will be important among the working groups co-chairs
- IDBD can also table questions and issues for later exploration in years 2 and 3. At present, the group can consider a “parking lot” for these types of suggestions so as not to lose the ideas and moving forward.
- The process will need to allow this kind of bookmarking and be flexible to cross-fertilization among groups.

A work execution plan was requested to layout the overall workscope for the IDBD work area. This will flow from the planned approach.

Agreement that IDBD should put emphasis on process over technology with the suggestion that there are areas like AEC company certification programs being evaluated for the emerging capabilities in the market to serve out sustainability related solutions.

The connection between practice, process, and performance is important and there is a strong linkage to the methods being practiced today that the IDBD working group needs to benchmark.

There were concerns raised about breaking into two groups (process/technology and barriers) as it was felt that there isn’t a clear distinction in the participation within these areas and there is likely a high amount of cross linking areas between them. Considering them in common will prevent overlapping or filtered individual contributions and may provide the ability to leverage collective wisdom from the entire group.

It was requested that we define/adhere to a common definition around “zero energy.” While it is desired to have such a definition, this will be addressed soon by the CBC’s steering committee.

- It was stated that our working group is centered around a process transformation that fundamentally requires a paradigm change around tools/processes used by the design community and an effective delivery process in order that design intents remains secure and meet whatever the desired energy objective is defined to be.
- The focus of IDBD is more general in nature—the finer details of a definition of net-zero energy will not greatly impact the short-term objectives of this group.

Is there a particular IPD process we should be looking at or analyzing?

- We do not currently have a single methodology. Part of the work will be to define principles.

Are we looking at a type of building? Existing, new? What about beyond a single building scale?

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Integrated Design and Building Delivery (IDBD) Working Group
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- Yes, we are looking at both new and existing buildings. Eventually, we will also want to look at building communities and relations to urban environments, but in the first stages this group will focus primarily on single buildings.
- There is also a multi-building systems group that is looking at campus-scale building developments.

Benchmarking should be a first step in the IPD process. Two methodologies are ASHRAE's BEQ or ENERGY STAR.

- Benchmarking is important, but there is a separate dedicated working group for that subject. For the IDBD's purposes, we should consider what principles a benchmarking program should have that will be useful in terms of integrated design and delivery
- We should just highlight where benchmarking fits into this process and then reference the Benchmarking and Performance Assurance Group
- Chairs will use the initial questions to try to draw boundaries around the IDBD group.