

TAG meeting 2: What does it mean to be a *Deep Green* building?

Brainstorming session

- Round 1: Defining success & group goals
- Round 2: Defining “deep green”

Summary

How do we measure Success? What are the goals for the TAG?

- Increased participation in the program
 - More, high performing buildings
 - Getting exceptional projects
 - Getting diversity of project types
- Pilot becomes standard or normalized (adopted as permanent program rather than pilot)
 - Leads to market change
 - More demonstration projects to serve as model (transparency –information about building design, construction and performance public)
- Develop a program that
 - Is accessible, easy to use.
 - Innovative - “blazes a trail”
 - Includes incentives that have a clear public benefit and attract participation from developers.
 - Accommodates a variety of building types and locations in the city (i.e. different criteria and incentives for residential vs. office buildings; different incentives / criteria based on the zone or area of the city).
 - Incorporates opportunities for existing buildings and new construction
 - Reducing policy and regulatory barriers
 - Goes beyond project by project
 - Increases credibility
- Develop a framework that.
 - Provides technical and financial feasibility
 - includes the cost of carbon; have a target / realistic dollars per ton
 - Real numbers showing payback (to developer; to public)
 - Include measurement and verification.

What does it mean to be a deep green building?

(In the context of the pilot program)

- Falls somewhere between buildings that achieves LEED Platinum and Living Building certification.
- Is innovative
 - Project breaks a rule or stretches a code
 - avoids incrementalism
- Part of a closed loop
- Buildings that can evolve – “net zero ready”
 - Could be living building ready or capable (i.e. easy to improve to that level as technology improves)
 - Need to recognize different building types – some may never meet net zero

- Deep green buildings should get better over time; they should be designed to adapt to new technologies
- Part of larger context / system (looking at different scales – neighborhood, city, region, etc)
 - Goes beyond an individual building
- Deep green will look different for different buildings.

What do we need / criteria / ways to get to more deep green buildings?

- Identify and address permitting roadblocks
- Tiered incentives and a variety of incentives
 - Financial
 - Tools / materials that demonstrate the benefits (real performance numbers to demonstrate the benefits)
- Recognize challenges for different building types
 - Top tier needs to “do it all” – meet water, energy, materials, and other goals
 - Second tier could focus on being exemplary in one or more area
 - Good to consider existing buildings as well
- Possible Criteria
 - LEED plus with all energy credits (except perhaps renewable ones)
 - EUI targets
 - Net Zero ready
 - Operational measurement
- Time is a big incentive
 - We should look at the permitting process
 - Are there standard building approaches that we can approve more quickly or with more predictability
- We don’t want to create a new rating system

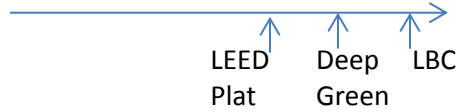
Overall brainstorming notes:

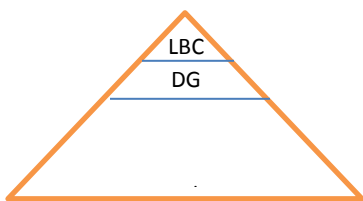
Measuring Success & Goals:

- In general, we want more projects across a diversity of construction types
- Need participation and impact
- More projects
- Better performance
- More building types
- No permitting roadblocks
- End goal is normalization and making it accessible
- Accessible
- Tiered incentives
 - In progress rewards
 - Tiered incentives could be useful to get breadth and depth
- Scope is twofold: what is the goal and how do we get there?
- Need to prove results (environmental benefit + reasonable cost + reasonable maintenance + creditability)
- Real performance numbers
 - What's the payback?
 - Need to come out with real numbers on owner payback and payback to the public
 - We should determine "what is the cost of the program per CO2 offset" use Inslee climate plan as target
 - Target for impact (\$/ton)
 - Public benefits
- What = success
- How to achieve and measure
- Goals – Known results (e.g. LBC)
- Green building has financial and psychological barriers to overcome
- Role of group is supporting policy + marketing+ education outcomes
- Should final numbers be required to be open; often cost as difficult to know as people often add inflate initial cost estimates to acknowledge uncertainty
- Need to get a feedback loop and regular updates to the program
- Overall goal is to make green building standard
- Incentives – from the city; money – financial analysis to know what will save money
- How? Educate, analysis, credibility
- Transparency of projects – feedback loop
- What to achieve and how to measure?
 - Beyond building by building
 - Scalable projects
- Program – larger effect
- Prioritize a major issue for 1 outcome
 - Example: Health (resonates with wider audience) – energy, water, etc all impact health
- Participation
 - New and existing building
 - Does there need to be a cap? Is the cap necessary (# of buildings)

- Time/Number creates “test”
- Pilot as a program becomes normalized
- Continue to reassess the bar
- Framework with cost carbon
- Addresses a barrier = blazes a trail;
- Should there be multiple standards?
- Lower EU first & then add renewables (net zero ready)
 - Operational goals
- Water
- Buildings should get greener over time
- Beyond building ready
- Connection to district / neighborhood approaches
 - Menu of what is available
- Part of closed loop
- Open to approaches to achieve targets
- Atmosphere for innovation
- Flexibility for areas w/out clear benchmarks
- District vs. site orientation times

What is deep green?

- Code  Regenerative
- On its way to sustainability
- LBC ready
- Different for each building type
- Uses least energy to function (per occupant)
- Pushes the market (in wake of project)



- LEED v4 – provide criteria that may inform Deep Green?
- Needs to be all encompassing
- Tiers – Matrix
 - Use standards as back check
- Developers want predictability
- Focus on City Benefits
 - Priority Green – energy, water, waste
 - 2030 – energy, water, transportation

- LBC categories encompassing
- LEED Platinum + All EA credits
- Lower EU first & then add renewables (net zero ready)
 - Operational goals
- Water
- Buildings should get greener over time
 - At minimum, not becoming worse
- M&V drives improvements
 - “EBOM requirement?”
- Tie to 2030 district?
- New buildings – easier to get efficient; old – less equipment
- Scale jumping – how to connect to larger picture
- Positive to offset negative
- Beyond building ready
- Connection to district / neighborhood approaches
 - Menu of what is available
- Part of closed loop
- Open to approaches to achieve targets
- District vs. site orientation
- Location specific priorities(aka LEED regional credits)
- Building specific priorities
- Challenge with predictability – provide range
- Multiple department tools and opportunity to enhance
- Time – permitting / timeline incentives
 - Buildings more complicated to design
 - Pre-evaluated approval times
- We should consider all aspects of sustainability, but we should also look for opportunities to set a standard for a specific element – ex. human health is hard to argue with so this presents an opportunity to really drive change in this area
- Easier to define sustainable (no impact/closed loop) than deep green
- Could be living building ready or capable (i.e. easy to improve to that level as technology improves)
- Want to avoid incrementalism
- Need to recognize different building types – some may never meet net zero
- What is the impact you can have at multiple scales?
- We don’t want to create a new rating system
- Goal is to get housing to zero living cost
- Historically, government and private sector have taken turns leading the way and the pushing up the market
- Participation is important
- Deep Green could be between Living Building & LEED Platinum
- Helping people transition to LEED v4 is important as we could see a drop off in participation
- Top tier needs to “do it all” – meet water, energy, materials, and other goals

- Second tier could focus on being exemplary in one or more area
- Good to consider existing buildings as well
- We should seek to start a dialogue on the true cost of decisions
- Goal could be for each project to break a rule to test boundaries
- Deep green will look different for different buildings.
- We could use LEED or other program as a measuring stick or check even if they don't get certified
- Focus on elements benefiting public like energy, water, waste, and maybe transportation
- Possible Criteria
 - LEED plus with all energy credits (except perhaps renewable ones)
 - EUI targets
 - Net Zero ready
 - Operational measurement
- Deep green buildings should get better over time; they should be designed to adapt to new technologies
- It may be cheaper to get environmental benefits through better new buildings than improving old buildings
- Closed loop system is good goal
- Important for goal not to be too prescriptive
- Considering thresholds that don't have clear benchmark would be good
- Should we have location-specific priorities like LEED?
- Need to have conversation about what's possible
- Do we want to take on big issues like perception of water reuse or state rules; we may want to start conversation at least
- Time is a big incentive
- We should look at the permitting process
- Are there standard building approaches that we can approve more quickly or with more predictability

Information for group

- Group would like
 - Summary of City goals
 - Summary of City mission statements
 - Summary of existing City incentives
 - Review of what other cities are doing