

Zero Energy Commercial Buildings Consortium (CBC)
Lighting/Daylighting and Controls Working Group
Outline

I. Working Group Overview

- A. Vision – 20-40 year view
 - 1. New Buildings
 - a. What do they look like?
 - b. How would they operate?
 - c. Major Milestones to achieve in 20 – 40 years
 - 2. Existing Buildings
 - a. Where is greatest potential to achieve zero energy?
 - b. Speed bumps/roadblocks?
 - c. Different technologies needed compared to new buildings?
- B. Lighting and Controls Scope
 - 1. Indoor
 - a. General lighting – electric; daylighting
 - b. Task lighting
 - c. Safety and Security
 - 2. Outdoor
 - a. Parking lot
 - b. Roadway
 - c. Walkway
 - d. Safety/Security
 - e. Façade
 - 3. Integration with other building systems
- C. Final report: 10-15 pages

II. Preliminary Report Outline

***Each of the 3 main subgroups (Lighting; Daylighting; Controls) will examine the following.**

- A. Vision of available technology in 2030 - 2050
 - 1. Components and Systems
 - 2. Design
 - a. Traditional vs. non-traditional
 - b. Human Factors
 - 3. Delivery

- a. Who is responsible?
 - b. Installation competencies
 - 4. Above needed for both new and existing buildings
- B. Key barriers
 - 1. Product/System technology
 - 2. Policy
 - a. Building codes/standards
 - i Energy
 - ii Safety
 - iii Electrical
 - b. Test and Measurement
 - c. Maintenance?
 - d. Sustainability?
 - 3. Market acceptance
 - a. Cost
 - b. Reliability
 - c. Occupant comfort/safety
 - d. Practicality
- C. Key developments and recommendations required to overcome barriers
 - 1. Technology
 - 2. Policy
 - 3. Market Acceptance