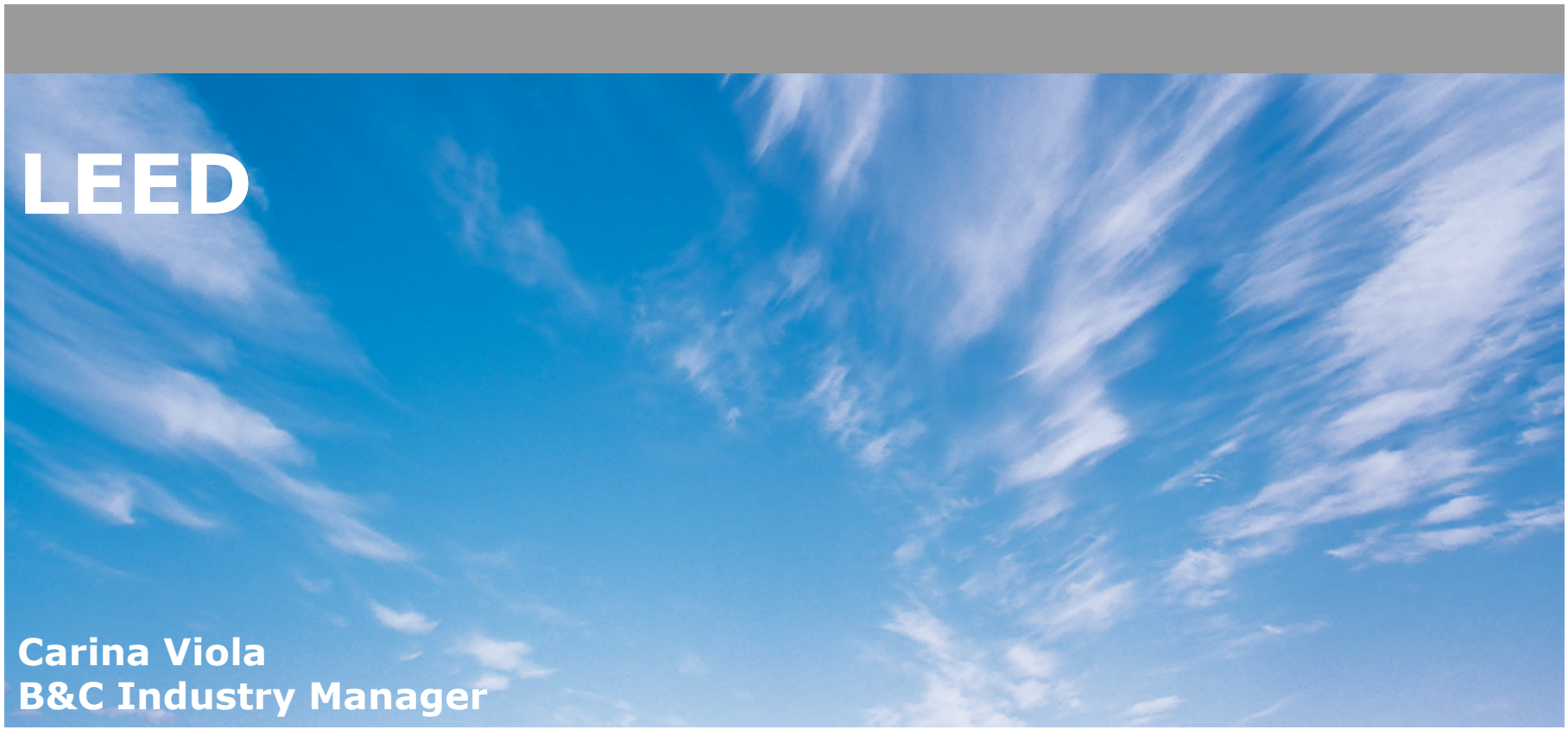
SABIC
Innovative
Plastics™



Sharing our futures

Leverage "Green Building" + inclusion in LEED rated

The ability to control heat gain or loss is one of the keys to LEED success. This is our market….

- Green Building is growing exponentially. A decade ago the US market size was negligible – today it is worth $12 Billion
- USGBC now has 10,000 members
- May 2007 – AIA, ASHRAE and IESNA Leaders agree to target Carbon-neutral buildings by 2030… supported by the Department of Energy
- November 2007 - New caucus formed in the House of Representatives to raise awareness of LEED Rating for Schools
- May 2008 – LEED for Healthcare Construction reference guide to be issued

Earning LEED® Credits through the use of Translucent Daylighting Systems

- The green concept has been advanced by the U.S. Green Building Council (USGBC), a coalition of building industry leaders working to promote environmentally responsible, profitable and healthy places to live and work.
- Light, airy, open environments are the key.
- These are building environments that have been proven,
  - to boost worker productivity,
  - reduce absenteeism,
  - help students learn
  - increase worker satisfaction.
- LEED (Leadership in Energy and Environmental Design) has become a cornerstone of sustainable design among building owners, architects, engineers and contractors.
- **Many municipalities across the country have mandated that all new public buildings, even if not actually submitted for LEED certification, must at least be designed and built with the goal of achieving certification.**
- One of the easiest ways to gather LEED credits revolves around lighting.

Total Possible Project Score

Sustainable Sites

Credit 8 – Light Pollution Reduction (1 point) *"Minimize light trespass from the building and site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction, and reduce development impact on nocturnal environments."*

Energy & Atmosphere

Prerequisite 2 – Minimum Energy Performance (prerequisite) "*Design the building project to comply with ... ASHRAE/IESNA Standard 90.1-2004...*"

Credit 1 – Optimize Energy Performance (1 point each, up to 10 points) "*Demonstrate a percentage improvement in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2004...*"

Credits 2.1 through 2.3 – Renewable Energy, 2.5%, 7.5%, 12.5% (1 point each) "*Use on-site renewable energy systems to offset building energy cost. Calculate project performance ... as a percentage of the building annual energy cost (2.5%,7.5%, 12.5%) ...* "

Total Possible Project Score (Ctd.)

Materials & Resources

Credit 4.1 – Recycled Content, 10% (post-consumer + ½ pre-consumer) (1 point) "*Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 10% of the total value of the materials in the project.*"

Credit 4.2 – Recycled Content, 20% (post-consumer + ½ pre-consumer) (1 point) "*Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes an additional 10% (total 20%)*"

Total Possible Project Score (Ctd.)

Indoor Environmental Quality

Credit 6.2 – Controllability of Systems (1 point) *"Provide individual comfort controls for 50% (minimum) of the building occupants to enable adjustments to suit individual task needs and performance. Operable windows can be used in lieu of comfort controls..."*

Credit 8.1 – Daylight & Views, Daylight 75% of Spaces (1 point) "*Demonstrate, through computer simulation, that a minimum daylight illumination level of 25 footcandles has been achieved in a minimum of 75% of all regularly occupied areas. Modeling must demonstrate 25 horizontal footcandles under clear sky conditions, at noon, on the equinox, at 30 inches above the floor.*"

Credit 8.2 – Daylight and Views, Views for 90% of Spaces (1 point) *"Achieve direct line-of-sight to the outdoor environment via vision glazing ... for building occupants in 90% of all regularly occupied areas."*