



Continental Automated
Buildings Association

**Your Information
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Automation**

**North America's
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Information Series Listing (Updated: January 4, 2010)

The following reports are made available to CABA members through the CABA Research Library.

(IS-2009-159) Green, High Performance Schools

This article from Air Quality Sciences explains the benefits of public and private schools that combine energy conservation with improved indoor air quality. A major concern is the increased initial cost to build a green school, even though the operating costs over a 40-year (or more) lifetime are expected to be lower for a green building than traditional construction that meets building codes. Good indoor air quality is claimed to improve student attendance and performance. The chemical constituents of indoor air are presented. Among the pollutants are volatile organic compounds, mold, and formaldehyde. The impact on asthma and autism is discussed.

(IS-2009-158) Greening of Corporate America

This article from McGraw Hill Construction surveyed executives to determine changes in attitudes toward sustainability between 2006 and 2009. A small majority of executives now sees business opportunities in sustainable products and a benefit to their companies to promote sustainability. The most popular sustainable activities are recycling, employee engagement, green buildings, and involvement with programs from governments and non-governmental agencies. Practices by many companies are presented.

(IS-2009-157) Creating Business-Class VoIP; Ensuring End-to-End Service Quality and Performance in a Multi-Vendor Environment

This article from Frost & Sullivan explains the challenges of using VoIP (Voice over IP) for telephone services. As of 2007 about 50% of companies surveyed were planning to substitute VoIP for switched telephony services. Although costs may be lower and flexibility increased, more responsibility rests on the company to ensure quality of service and availability. VoIP telephone service is sharing the same path and bandwidth as data traffic. Also, more responsibility rests at the periphery of the network with the company than with a switch that may be maintained by a telephone company.

(IS-2009-156) Doing Well by Doing Good? Green Office Buildings

This report from the Center for the Study of Energy Markets at the University of California at Berkeley examines the economic impact of green buildings. Buildings that are certified as green command higher rents by about 3-6% and sell for about 16% more. These conclusions are based on a study of more than 10,000 buildings. Buildings consume about 40% of the world energy and emit about 30% of the worldwide green house gases. Buildings were rated using Energy Star and LEED (Leadership in Energy and Environmental Design). The statistical methodology is described in detail.

(IS-2009-155) Solid State Lighting: Benchmarking Analysis

This paper from **Cleantech Approach** evaluates the market potential for solid state lighting. Lighting accounts for 20-25% of U.S. electricity consumption. 40% of lighting is used in buildings, both commercial and residential. LEDs outperform incandescent and halogen lights on a payback basis, and are a slight improvement over compact fluorescent bulbs. Detailed analyses are included.

(IS-2009-154) The Smart Grid: An Introduction

This booklet from the U.S. Department of Energy introduces the electric grid and explains technologies that could improve reliability to create a "smart grid." The state of the electric grid reliability is discussed, including the increased rate of failures leading to blackouts. Topics for a smart grid are presented including AMI (Advanced Metering Infrastructure), visualization (distributed sensors), and distributed generation. Technologies and projects for a smart grid are mentioned.