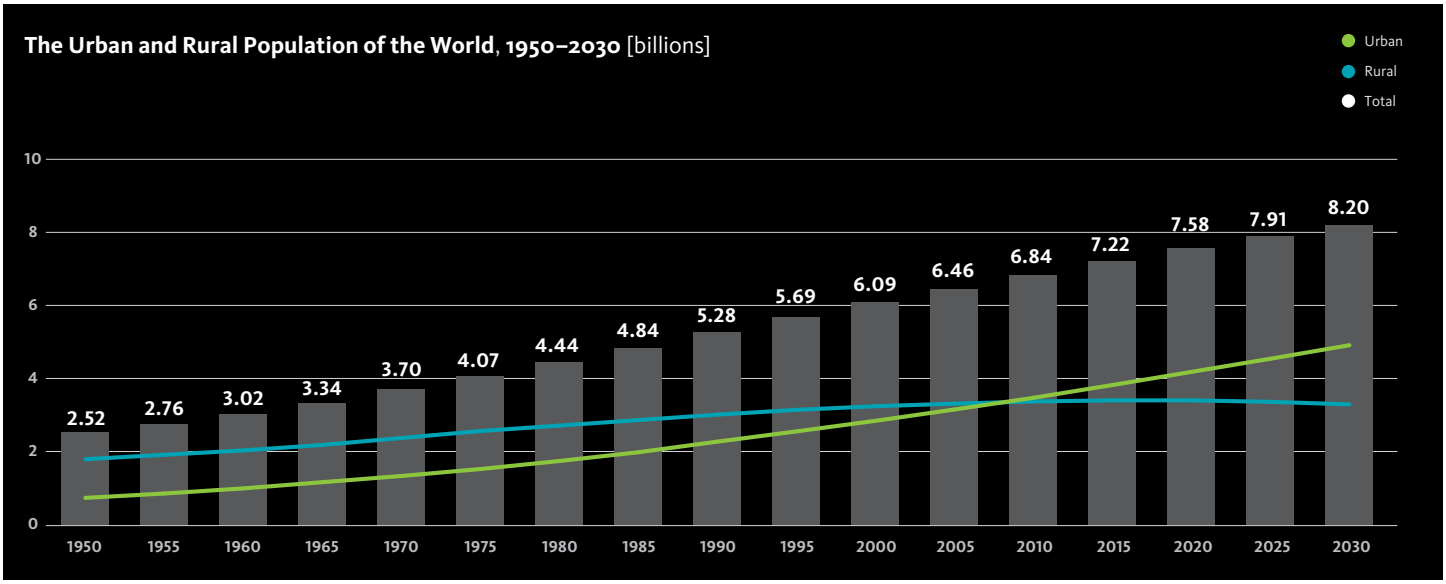
Sustainability Industry Highlights for the Architecture, Engineering & Construction (AEC) Industry



- By the end of 2008, for the first time the majority of the world's population will live in urban environments.[1]
- About US $40 trillion will be required to build, rebuild, and repair the world's infrastructure in the years 2005-2030.[2]
- To meet the housing and business needs of its urban population growth by 2025, China will need to build between 20,000 and 50,000 new skyscrapers.[3]
- By 2020 China plans to construct 97 new airports to keep pace with its expanding economy.[4]
- Worldwide, buildings account for about 40% of material and energy use, 17% of freshwater withdrawals, and 25% of wood harvest.[5]
- Buildings alone account for a sizable amount of global GHG emissions, representing 39% of CO_2 emissions in the United States.[6] This is primarily due to energy use, as buildings consume 76 percent of all power plant-generated electricity.[7]
- With a goal of 20% energy reduction by 2020, The European Union's Energy Performance of Buildings Directive (EPBD) will have a dramatic impact on architects and engineers responsible for designing buildings that meet the new energy requirements.
- 70% of architects cite client demand as the primary influence on their likelihood to design green buildings.[8]
- 70% of architects currently specify high-efficiency heating, ventilation, and air conditioning (HVAC) systems on more than half of their projects, compared to 45% five years ago; 48% report using retention basins for storm runoff, compared to 33% five years ago; 46% of architects claim to have maximized solar lighting, compared to 30% five years ago; and 29% used energy modeling and baseline analysis, compared to 12% five years ago.[8]
- Although 50% of architects reported having clients inquire about green building on the majority of their projects, only 30% implemented green building elements in their projects and only 10% currently measure the carbon footprint of their projects.[8]
- In 2002 less than half of architects were incorporating sustainable design practices into their projects, whereas 90% expect to do so by 2012.[9]
- The value of green building construction in the United States is projected to increase to $60 billion by 2010,[10] and about 10% of U.S. commercial construction starts are expected to be green.[11]
- The business case for green design demonstrates that certified buildings outperform peers in sale, rental, and occupancy rates.[12]

SOURCES

[1] According to www.un.org/apps/news/story.asp?NewsID=25762&Cr=population&Cr1

[2] Estimated by Booz Allen Hamilton, as cited in www.strategy-business.com/press/article/07104?gko=a8c38

[3] According to McKinsey Global Institute, http://www.reuters.com/article/topNews/idUSPEK 34992820080324?sp=true.

[4] According to www.chinadaily.com.cn/bizchina/2008-01/27/content_6423580.htm.

[5] U. S. Green Building Council Building Impacts presentation: www.usgbc.org/DisplayPage.aspx?CMSPageID=1720.

[6] According to www.documents.dgs.ca.gov/dgs/pio/facts/LA%20 workshop/climate.pdf.

[7] According to www.architecture2030.org/current_situation/building_sector.html.

[8] 2007 Autodesk/AIA Green Index Highlights.

[9] According to Autodesk Green Index 2007: http://images.autodesk.com/adsk/files/2007_autodesk_aia_greenindex.pdf.

[10] McGraw-Hill Construction Analytics, SmartMarket Trends Report 2008. As referenced in www.usgbc.org/ShowFile.aspx?DocumentID=3340.

[11] McGraw-Hill Green Building SmartMarket Report 2006. As referenced in www.usgbc.org/ShowFile.aspx?DocumentID=3340.

[12] Based on www.usgbc.org/Docs/News/NBI%20and%2CoStar%20Group%20Release%2040108.pdf.

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