



Figure 2. Vision of the Department of Energy's Building Technologies Program. The goal is to produce buildings that generate as much energy as they consume. To meet that goal, developers of green buildings begin with research and development, which then helps validate the technology and provides an informed way to introduce it. Once technology is in the field, information about its use informs the derivation of equipment standards and analysis. (Figure from http://www1.eere.energy.gov/buildings/program_areas.html.)

The opportunity to transform policy, influence behavior and effect a “step change” in the design, construction, and operation of buildings to address global warming, efficiency, and other green goals is upon us. Seldom in recent memory has there been as much political and policy momentum converging on a single agenda. Virginia Tech scholar Arthur Nelson has forecast that 89 million new or replacement homes and 190 billion square feet of new offices, institutions, stores, and other nonresidential buildings will be constructed through 2050. If Nelson's forecasts are correct, two thirds of development on the

ground in 2050 will have been or will be built between 2007 and then.⁸ As government, industry, and citizens scale these steps, the type of atmospheric climate—and school, home and work environments—must be kept in mind so that the next generation will benefit and have a strong foundation from which to make its own strides. ■

References

1. P. Schwartzman, “Architects the Latest Dominoes to Fall,” *The Washington Post*, p. B1, Mar. 28, 2009.
2. *The Federal Commitment to Green Building: Experiences and Expectations*, Office of the Federal Environmental Executive, Sept. 2003; http://www.ofee.gov/sb/fgb_report.pdf.
3. J.R. Steele, “Green Construction, Initiatives and Legal Issues Surrounding the Trend,” *Business Law Today*, vol. 17, no. 2, Nov./Dec. 2007.
4. H.J. Hebert, *EPA Takes First Step Toward Climate Change Regs*, Apr. 17, 2009; <http://www.2theadvocate.com/news/43189692.html>.
5. Table C1. Total Energy Consumption by Major Fuel for Non-Mall Buildings; 2003; http://www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/2003set9/2003excel/c1.xls.
6. J. Yudelson, *The Green Building Revolution*, Island Press, 2008.
7. G. White, “Introduction to the Stimulus Package: Green Building and the Stimulus (Part I),” *Green Real Estate Law Journal*, Mar. 3, 2009.
8. R. Ewing et al, *Growing Cooler—The Evidence on Urban Development and Climate Change*, Urban Land Institute, 2008; <http://www.smartgrowthamerica.org/documents/growingcoolerCH1.pdf>.

Robert S. Wassmann is a senior manager at Noblis, where his interests include environmental planning, monitoring and remediation, and the development of acquisition strategies. He received a BS in chemistry from Western Maryland College. Contact him at rwassman@noblis.org.



Sigma—In Addition

More from Noblis authors:

Program Management Office—Does Scope Constrain Best Practice?, R. Vorthman, presented at a Noblis Program Management Cluster Group meeting, Mar. 11, 2009; <http://www.noblis.org/MissionAreas/es/ThoughtLeadership/ProgramManagementClusterGroup/Documents/DoesScopeConstrainBestPractice.pdf>.

The Modern Program Management Office—New Goals, New Organization: Aligning Goals with Reality, M. Nelson, presented at a Noblis Program Management Cluster Group meeting, Jan. 21, 2009; <http://www.noblis.org/MissionAreas/es/ThoughtLeadership/ProgramManagementClusterGroup/Pages/default.aspx>.

Digital Image Processing: An Algorithmic Introduction, M. Burge, presentation based on his book of the same name; http://www.amazon.com/Digital-Image-Processing-Algorithmic-Introduction/dp/1846283795/ref=sr_1_1?ie=UTF8&s=books&qid=1240364675&sr=1-1.

Assessing Quality for Friction Ridge Impressions, A. Hicklin, presented at a Noblis Biometric Identification Cluster Group meeting, Oct. 22, 2008. Contact hicklin@noblis.org for a copy of this presentation.

Adapting to a Changing Climate: Opportunities and Risks, presented at Technology Tuesdays, D. Evans, Jan. 6, 2009. Contact david.evans@noblis.org for a copy of this presentation.

Tracking Your Carbon Footprint, R. Wassmann, presented at Executive Networks 2008, Greater Washington Board of Trade, Washington, DC, Nov. 18, 2008. Contact rwassman@noblis.org for a copy of this presentation.

Sigma Spotlight—Going Green in the Service Sector, M. Corrigan, “Sigma: Information Technology,” p. 40, June 2008.

RAC Demonstrations and Inpatient Rehabilitation—Vision of Things to Come?, J. Snecinski, published in the Health Care Compliance Association's *Compliance Today*, vol. 11, no. 3, pp. 21–23, Mar. 2009.

