

## **Appendix E: Agency/Department Green Building Resources and Tools**

- **Environmental Protection Agency**
  - EPA Green Building website: <<http://www.epa.gov/greenbuilding>>
  - Laboratories for the 21st Century: <<http://www.epa.gov/labs21century>>
  - Energy Star: <<http://www.energystar.gov>>
  - WAVE water management software:  
<<http://www.epa.gov/owm/water-efficiency>>
  - Environmentally Preferable Purchasing: <<http://www.epa.gov/oppt/epc>>
  - Non-point Source Pollution: <<http://www.epa.gov/owow/nps/urban.html>>
  - Construction and Demolition (C&D) Debris:  
<<http://www.epa.gov/epaoswer/non-hw/debris>>
  - Comprehensive Procurement Guidelines: <<http://www.epa.gov/cpg>>
  - Indoor Environmental Quality:
    - Comprehensive guidance, data, and tools for commercial buildings. <<http://www.epa.gov/iaq/largebldgs/>>
      - (a) I-BEAM Software: Indoor Air Quality Building Education and Assessment Model.
      - (b) Analysis of Energy and IAQ compatibilities and tradeoffs in ventilation systems and controls. Modeling analysis.
      - (c) BASE study: Building Assessment Survey and Evaluation (BASE) provides comprehensive IAQ data on commercial buildings.
    - Comprehensive guidance, tools, and activities for IAQ in schools
      - (a) Comprehensive IAQ guidance for schools  
<<http://www.epa.gov/iaq/schools/toolkit.html>>
      - (b) School Advanced Ventilation System Software (SAVES). Software to evaluate ventilation and humidity control performance of energy recovery ventilation systems and to calculate their cost effectiveness. Available at  
<<http://www.epa.gov/iaq/schooldesign/saves.html>>
- **Department of Defense**

- Sustainable Planning: A Multi-Service Assessment, 1999:  
<<http://www.hq.usace.army.mil/isd/librarie/RP/Sustainability/Sustainable%20Planning%20Stdy.pdf>>
- Defense Environmental Network and Information Exchange (DENIX):  
<<https://www.denix.osd.mil/denix/Public/Library/Sustain/sustain.html>>
- Pentagon Renovation sustainable design information:  
<<http://renovation.pentagon.mil/sustainabledesign.htm>>

- **U.S. Army**

- The Army Facilities and Housing Directorate website (Army policy documents on sustainable design):  
<<http://www.hqda.army.mil/acsimweb/fd/linksSDD.htm>>
- The USACE Sustainable Design & Development website:  
<<http://www.cecer.army.mil/sustdesign>>
- Planning, Engineering, and Design of Sustainable Facilities and Infrastructure: An Assessment of the State of the Practice  
<<http://www.cecer.army.mil/td/tips/pub/details.cfm?PUBID=2208&RESEARCH=2>>

- **U.S. Air Force**

- AFCEE's Sustainable Development website:  
<<http://www.afcee.brooks.af.mil/eq/programs/progpage.asp>>
- Air Force Environmentally Responsible Facilities Guide:  
<<http://www.afcee.brooks.af.mil/green/facilitiesguide/erfguide.pdf>>
- ACC Sustainable Facilities Guide (March 2000)—a more condensed version: <<http://www.afcee.brooks.af.mil/green/case/accsfguide.pdf>>
- AFCEE's C&D Waste Management Guide:  
<<http://www.afcee.brooks.af.mil/eq/programs/summary.asp>>
- Air Force Water Conservation Guidebook (May 2002) (AFCESA):  
<<http://www.afcesa.af.mil/Directorate/CES/Civil/Water/AF%20Water%20Conservation%20Guidebook.pdf>>
- AFCEE's Web University: Sustainable Development Training – introductory course for sustainable planning, design, construction and management of facilities:  
<<https://webu.brooks.af.mil/webu/secure/onlinecourse.asp>>

- **General Services Administration**
  - GSA Sustainable Design webpage:  
<<http://www.gsa.gov/sustainabledesign>>
  - Real Property Sustainable Development Guide (general sustainability principles): <<http://policyworks.gov/org/main/mp/gsa/index.html>>
  
- **U.S. Department of the Interior - National Park Service**
  - NPS has an older website at <<http://www.nps.gov/renew>> and a newer website at <<http://www.nps.gov/sustain>>. Both contain extensive resources and case studies.
  - The NPS periodical *Sustainability News* features information on sustainable National Park facilities and additional resources that parks can use.
  - Guiding Principles of Sustainable Design:  
<<http://www.nps.gov/dsc/dsgncnstr/gpsd/toc.html>>
  
- **Department of Energy**
  - Roadmap for Integrating Sustainable Design into Site-Level Operations:  
<<http://www.pnl.gov/doesustainabledesign>>
  - DOE Energy Efficiency and Renewable Energy, Buildings Technology Program, High Performance Buildings website:  
<[http://www.eere.energy.gov/buildings/high\\_performance/](http://www.eere.energy.gov/buildings/high_performance/)>
  - Greening Federal Facilities website:  
<[http://www.eere.energy.gov/femp/techassist/green\\_fed\\_facilities.html](http://www.eere.energy.gov/femp/techassist/green_fed_facilities.html)>
  
- **National Aeronautics and Space Administration (NASA)**
  - NPG 8820.2E, Facility Project Implementation Guide:  
<[http://nodis-dms.gsfc.nasa.gov/Draft\\_NPGs/N\\_PG\\_8820\\_002E\\_.doc](http://nodis-dms.gsfc.nasa.gov/Draft_NPGs/N_PG_8820_002E_.doc)>
  - NPG 8570.1, Energy Efficiency and Water Conservation Technologies and Practices:  
<[http://nodis3.gsfc.nasa.gov/library/displayDir.cfm?Internal\\_ID=N\\_PG\\_8570\\_0001\\_&page\\_name=main](http://nodis3.gsfc.nasa.gov/library/displayDir.cfm?Internal_ID=N_PG_8570_0001_&page_name=main)>

- NPD 8820.3, Facility Sustainable Design:  
<[http://nodis3.gsfc.nasa.gov/library/displayDir.cfm?Internal\\_ID=N\\_PD\\_8820\\_0003\\_&page\\_name=main](http://nodis3.gsfc.nasa.gov/library/displayDir.cfm?Internal_ID=N_PD_8820_0003_&page_name=main)>

- **Nongovernmental Tools & Resources**

- The **New Buildings Institute** has created an industry-leading set of energy efficiency guidelines, called the Energy Benchmark for High Performance Buildings (E-Benchmark™ - see <http://www.newbuildings.org/ABG.htm>). These guidelines, intended for use in designing, constructing and operating commercial buildings to exceed national model codes by 30-50+ percent, emphasize actual building performance as well as design, through start-up commissioning and continuing monitoring, benchmarking, and a performance warranty. The guidelines also provide an explicit link to the energy credits under LEED™.
- **Building Green**, publishers of *Environmental Building News*, has an on-line database of more than 1,600 screened and reviewed green building products with guideline specifications, called the GreenSpec Directory, available through subscription only. EPA provided funding to research and tag materials that meet the Comprehensive Procurement Guidelines for recovered content.