

## **U.S. EPA's Green Indoor Environments and ENERGY STAR Programs**

The U.S. Environmental Protection Agency's (EPA) mission is to protect human health and the environment. EPA's Indoor Environments Division (IED) conducts research and public outreach on indoor environmental quality (IEQ) with a goal of educating the public about indoor environmental problems and promoting healthy indoor environments in homes, schools, and large buildings. IED's new Green Indoor Environments Program promotes good IEQ concepts and practices as an essential component of the emerging green buildings movement.

IEQ issues have perhaps the greatest potential to impact the health of building occupants and are commonly overlooked during the design, construction, operation, and renovation of buildings. Attention to IEQ issues includes controlling pollution sources, properly designing and maintaining building ventilation systems, controlling water vapor and moisture, ensuring occupant comfort, and addressing overall facility maintenance and operation procedures. The Green Indoor Environments Program is identifying and developing best practices for designing and maintaining healthy indoor environments. Upon completion, these will be promoted through guidance documents and other tools targeted to the building industry and green building movement. The Green Indoor Environments Program also promotes EPA's existing IEQ guidance and tools for building design and operation including the *IAQ Tools for Schools* Program, radon-resistant new construction, mold and moisture control and remediation guidance for residences, commercial buildings, and schools, the IAQ Building Education and Assessment (I-BEAM) Model, and the School Advanced Ventilation Engineering Software (SAVES).

EPA's ENERGY STAR program is a voluntary partnership to improve energy efficiency. ENERGY STAR offers tools and resources to achieve superior energy performance. Although new technologies can improve performance, EPA has found that proper operation, maintenance and commissioning are key factors in top performing buildings. To encourage energy efficiency in buildings, EPA launched the ENERGY STAR Challenge – Build a Better World 10% at a Time. The challenge calls on building owners to determine current building energy use; establish energy improvement goals; and make improvements resulting in energy savings of 10% or more. As a result, EPA estimates that by 2015 Americans would reduce greenhouse gas emissions by more than 20 MMTCE, equivalent to the emissions from 15 million vehicles, while saving about \$10 billion. Leading organizations already have reduced building energy use by 10% and more with energy management practices that pay off financially and for our environment. Visit [www.energystar.gov/challenge](http://www.energystar.gov/challenge) to learn more.

EPA's Green Building Workgroup [www.epa.gov/greenbuilding](http://www.epa.gov/greenbuilding) brings together all of EPA's programs to reduce the environmental impact of buildings and development.