

EPA Water Sense

In response to increasing concerns about the sufficiency and sustainability of water availability, as well as related infrastructure and energy use, the EPA Water Sense Program seeks to provide consumers with easy ways to save water both through (1) labeling of water-efficient products and (2) information to help people use water more efficiently. Products and services that display the “Water Sense” label have been certified to be at least 20 per cent more efficient without sacrificing performance.

Product manufacturers enter a partnership agreement with EPA and agree to meet specifications; products are then certified by independent certifying bodies. Certified products include showerheads, sink faucets and accessories, toilets, urinals and landscape irrigation controllers (which tailor watering schedules to actual site conditions). The EPA Water Sense website contains a product search feature to identify certified manufacture brands and models for specific products.

EPA and DOE Energy Star Program

The U.S. Environmental Protection Agency and U.S. Department of Energy Star Program offers opportunities for homes, commercial and institutional buildings to save significant amounts of energy and related energy costs. For households many products are tested and rated for energy-efficiency and product performance according to strict product specifications before the Energy Star label is given. Several categories consisting of many products are rated and may receive Energy Star certification including most household appliances, building products (including seal/insulation, roof windows and doors), computers, electronics, heating and cooling, lighting and water heating. (Note: Many of these appliances which do not meet the strict standards required for Energy Star certification still have the familiar yellow label with a relative energy efficiency and estimated cost of operation).

In addition, Energy Star certified new homes are independently verified to be at least 15% more energy-efficient than homes built to the 2009 International Energy Conservation Code (IECC) and have additional features that deliver a total energy-efficiency improvement of up to 30% compared to “typical” new homes. The Energy Star website features a locator to find builders who offer Energy Star certified homes.

Energy Star certification is also available for many categories of commercial and institutional facilities and manufacturing facilities. EPA offers an online tool (“Portfolio Manager”) to enable building owners to calculate an energy management score which (1) must achieve a score of 75 or higher to be eligible and (2) must be verified by an independent engineer or architect. If the building does not achieve certification status, EPA also offers Guidelines for Energy Management to improve energy efficiency.

EPA Transportation Vehicle Ratings and Regulation Programs

For a long time consumers have been aware of the (1) EPA fuel economy ratings, which rate new vehicles as to expected miles per gallon under so-called city and highway driving conditions and (2) the regulatory program which requires vehicle manufacturers to meet overall weighted mileage standards and mileage standards for specific classes of vehicles. Intended to help consumers save energy and money, the program has always been somewhat controversial because of complicated test procedures and differences in test conditions *vis a vis* actual driving conditions. Although recent changes in testing

and calculation procedures *seem* to have made the EPA estimates more accurate, perhaps the best use of the EPA estimates remains as a relative comparison of the mileage and energy efficiency among vehicles and vehicle classes.

EPA (and state) regulatory authority for vehicle air pollution emissions has evolved since the Clean Air Act Amendments of 1972 to apply new technologies to reduce so-called criteria pollutants, photochemical smog (and its precursor pollutant emissions) and toxic emissions. Recently, however, EPA has begun regulation of Greenhouse Gas Emissions from Transportation Vehicles based upon a legal “Endangerment Finding” to public health and welfare under the Clean Air Act. (Note: The U.S. Circuit Court of Appeals upheld EPA authority on June 26, 2012). Greenhouse gas emission standards have been prepared up to the year 2025, but unfortunately are subject to delay from political deregulatory pressures. California, the largest market seeks to retain tougher standards, which likely means that such vehicles will be available to consumers. Other standards for heavy-duty vehicles, including vans and pick-up trucks, may be similarly affected.