

## **The Green Building Handbook of South Africa: Volume 10: The Essential Guide/ Van Wyk, Llewellyn V (ed)**

### **ABSTRACT:**

**Although not explicitly stated, green A. rating systems fundamentally aim to improve building performance albeit with a bias toward environmental issues. Thus LEED promotes its system as being "resource efficient" reducing water and energy use and lowering greenhouse gas emissions. In promoting the new LEED System the United States Green Building Council notes that "by integrating technical and living systems, the team can achieve high levels of building performance, human performance, and environmental benefits." The benefits of improving building performance have also been noted within the U.S. Congress who has established the High-Performance Buildings Caucus of the U.S. Congress (HPBCCC) to support the development of private sector standards, codes and guidelines. Defining high performance building is quite challenging: The US Government Public Law "Energy Independence and Security Act of 2007" (121 Stat 1598, para. 12) defines high-performance building as follows: "High-performance building means a building that integrates and optimizes on a life cycle basis all major high performance attributes, including energy conservation, environment, safety, security, durability, accessibility, cost-benefit, productivity, sustainability, functionality, and operational considerations" while the High-Performance Building Council (HPBC) adopted the following definition for high-performance buildings: "High-performance buildings, which address human, environmental, economic and total Societal impact, are the result of the application of the highest level design, construction, operation and maintenance principles - a paradigm change for the built environment."**