

ASHRAE Technical FAQ

ID 93

Question Will recent or future versions of Standard 90.1 surpass the 30% better than 90.1-1999 goal outlined in the AEDGs and will the AEDG's still be viable publications?

ASHRAE's series of [ASHRAE Advanced Energy Design Guides \(AEDG\)](#) aim to "achieve 30% energy savings toward a net-zero energy building" based on the 90.1-1999. Certainly as 90.1 gets more stringent, the standard will eventually surpass the energy savings in the 30% AEDGs, however, they will remain excellent tools for energy-efficient design of buildings for quite some time. These guides provide a good starting point for anyone looking for a simple way to improve their energy efficiency and remain a good resource due to the information contained in the how-to tips.

In fact, many of the energy simulation results for the AEDGs showed greater than 30% savings (see the [Technical Support Documents](#)); in some climates the recommendations also exceed 90.1-2004 by 30%.

Long
Answer

Also, not all areas of the US have incorporated the latest 90.1 standards into code, which would mean those areas would still benefit greatly from the savings outlined in the guide. Many states are slow to adopt the latest versions of 90.1 keeping the 30% AEDGs relevant for several years.

The guides are still useful when comparing to the 2004 and 2007 versions of the 90.1 but the 30% savings erodes to a lower value (still at least 15% relative to 2007). Each of the AEDGs except the Small Office guide (which was developed before the 2004 information was fully available) lists the average savings as compared to 2004.

Meanwhile, the 50% AEDG's use Standard 90.1-2004 as a benchmark. There are now five guides in the 50% series: Small to Medium Offices, Medium to Big Box Retail, K-12 Schools, Large Hospitals, and Grocery Stores. As with the 30% guides, the energy savings are shown in comparison to more recent versions of 90.1 in addition to the 50% savings as compared to 90.1 -2004.

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ASHRAE Pubs [ASHRAE Standard 90.1-2016](#) plus [ASHRAE BOD approved addenda](#)

[ASHRAE Advanced Energy Design Guides \(AEDG\)](#)

Topic References energy-efficiency, commercial buildings, advanced energy design guides (AEDG),
net-zero energy, 90.1

	Cognizant ASHRAE Committees	Refer to Organization
1	TC 7.6	
2	SSPC 90.1	