

# Creating a World of Zero Energy Buildings

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## ABSTRACT

With the advancement of energy efficiency and the rapid decrease in cost of solar electric systems, the concept of creating a building that produces as much energy as it consumes is becoming a reality. This presentation will look at how to achieve a zero energy building, the process for achieving success, and some of the technologies that are used to achieve this goal.

## BIOGRAPHY

**Paul Torcellini** is a Principal Engineer for Commercial Buildings Research at the National Renewable Energy Laboratory (NREL), a DOE national laboratory, and an Associate Professor at Eastern Connecticut State University.

Paul has authored or co-authored more than 50 papers and articles related to energy efficiency and zero-energy commercial buildings. Among his many awards, Paul has received two ASHRAE Technology Awards for his energy-efficient buildings work and two Energy User News magazine's Efficient Building Awards. Paul was key in creating the performance based procurement process used to achieve zero energy building status for NREL's Research Support Facility and has been key in the development of the Advanced Energy Design Guide series from ASHRAE.

Paul is a registered Professional Engineer holding a PhD from Purdue University and a BSME from WPI.