White Paper—Zero Net Energy Buildings

Issue: Residential and commercial buildings consume 41% of all energy in the United States, and the majority of that energy is used to heat, ventilate and cool our buildings throughout the year.

We have the technology and techniques today that can significantly reduce building energy consumption to virtually zero, drastically reduce monthly utility bills, as well as greenhouse gas emissions for residential, commercial and municipal buildings.

Background:

- In the private sector, the Net Zero Energy (ZNE) building industry is rapidly expanding all across the country.
- Builders, developers, State and local communities, technology providers and NGO's have created tremendous momentum behind zero energy buildings and the market is only expected to grow.
- The building industry lacks a consistent definition for ZNE and requires a common set of nomenclature, metrics and implementation guidelines.
- Achieving low and ZNE can become standard practice for most residential and commercial buildings today.
- Recognizing that in order to achieve significant reductions in building energy consumption, the nation needs a reliable and consistent framework for ZNE buildings.
- A solution could be for the U.S. Department of Energy to model an existing strategy conducted by the National Institute of Technology & Standards (NIST), which provided a leadership role, worked with stakeholders and developed a voluntary framework on cyber-security.

Request: We respectfully request that the U.S. Department of Energy be directed to provide a leadership role in establishing a voluntary ZNE framework—based on existing standards, guidelines, and practices—to facilitate ZNE as the norm for building design and construction.

This would provide the building industry and consumers with an accepted set of market definitions, nomenclature, metrics and implementation guidelines needed to achieve economies of scale and meet the demand and expectations for these high-performance buildings.

For additional information, please contact:

ACEEE
Suzanne Watson
202-507-4006
swatson@aceee.org

Jennifer Amann
202- 507-4015
jamann@aceee.org

Bosch
Meredith Tunick
202-603-6979
meredith.tunick@us.bosch.com

Mark Stimson
(805)657-4508
mark.stimson@us.bosch.com

NASEO
David Terry
703-299-8800
dterry@naseo.org

Sandy Fazeli
703-299-8800
sfazeli@naseo.org