The 2005 UT SolarD SNAP House combines sustainable living with mass customization. Although built as a single competition piece, the house is a prototype for a pre-fabricated contemporary dwelling adaptable to various cultures, climates and price ranges. The SNAP house hopes to inspire a paradigm shift in traditional housing markets by introducing new technologies and methods of fabrication, empowering the occupants to become energy producers rather than consumers.

**Buildability**

The house disassembles into four modules, or SNAPs, allowing transport on standard trucks without special permits. Additional SNAPs can be added or interchanged for increased customization. An innovative hinge-and-wedge system allows the SNAP House to be easily transported and modified for optimal solar performance in various regions. The Structural Insulated Panel (SIP) wall system is lightweight and easily fabricated. Functioning as structure and insulating envelope, the SIP system reduces material waste and on-site labor.
Livability

An open shelf and sliding face panel system allows for customization and adaptation in organizing the kitchen.

Appliances have been selected for their space- and energy-saving features.

The deck is shaded by semi-transparent photovoltaic panels and a vertical array of evacuated tube solar collectors. By integrating these systems into occupiable space, the SNAP House actively engages its occupants in sustainable living.

The sidelight at the front entry can be transformed from translucent to clear glass with a standard indoor switch.

A long ramp allows a slow approach to the front door where it seamlessly transitions and wraps to form the southern deck.

Specially designed, versatile furniture increases the SNAP House’s efficiency. The bed can be folded up to reveal a couch; the frame below adds storage space to the bedroom.

The open plan allows for increased versatility in a small footprint.

The SNAP Comm’s touchscreen panel gives occupants power to monitor and control the performance of all mechanical systems.

The generous deck functions as an outdoor living room in the temperate climate of Austin.

The exterior of the SNAP House is clad in reclaimed redwood and zinc. These materials are complemented by a green roof and greenscreen.