

STAYING POWER

*ZeroEnergy Design creates a durable
eco-oasis on the South Shore.*

BY RACHEL KASHDAN — PHOTOGRAPHS BY ERIC ROTH





WHILE A HINGHAM COUPLE LOVED their secluded property with views of a neighboring marsh, they were no longer enamored with the '80s-era house that sat upon it. "They were looking for a new home that would make better use of this site," says Stephanie Horowitz, managing director of ZeroEnergy Design, the Boston firm the pair hired to build them an updated house on the property. The two also wanted their new digs to allow them to live a greener lifestyle. "They felt that going net-zero would be the most [enduring] and ecologically responsible option," Horowitz adds.

So the team got to work, building a 4,200-square-foot dwelling that embraces the natural surroundings (picture: multiple decks and a large vegetable garden). Thanks to a private guest studio above the garage, it also offers their young adult children a place to feel at home while visiting. As for the couple's net-zero-energy plans? The house sports 36 rooftop solar panels, extra insulation, and efficient ventilation, heating, and cooling systems. "It's really a wonderful living environment for the homeowners," Horowitz says.



ELEVATE THE ENTRYWAY

Horowitz and project manager John Mucciarone designed a sustainably forested ipe-wood staircase to connect the driveway to a deck on the second level, which comprises the house's main entry, the kitchen, and the dining and living areas. "The placement of this stair invites visitors up to where you're presented with this beautiful view of the marsh," Horowitz explains.

TAKE IT OUTSIDE

To maximize the home's connection to the outdoors, Horowitz designed distinct al fresco living areas for each of its levels. The second-floor deck, which connects to the kitchen through an oversize sliding glass door, includes a built-in grilling station and a dining area. Meanwhile, one story down behind the garage, the architect positioned a jacuzzi with an adjoining outdoor shower.

CUT CONSUMPTION

Achieving a net-zero-energy status began with sealing the building envelope using a thick layer of continuous insulation, which Horowitz likens to a "winter jacket," as well as incorporating triple-glazed windows. Then, to avoid using fossil fuels, the team opted for an air-source heat pump that relies on electricity. "The operational energy can be offset with the energy generated by the onsite solar panels," Horowitz explains.





PRACTICE RESTRAINT

Horowitz calls the couple's vision for the home's interior, with its white-oak flooring and neutral paint colors, "simple and modern." The goals were to create spaces that flow easily from one to the next (cue: the circular, open-concept layout of the main floor) and maximize panoramas of the site. In the living area, for instance, an 8-foot-tall window that wraps the corner near the gas fireplace shows off the grassy marshland.

ARCHITECT
ZEROENERGY DESIGN

CABINETMAKER
SHARP WOODWORKING

SOLAR INSTALLER
MY GENERATION ENERGY

By the Numbers

The Bay State has long been a leader in green-building and energy-conservation initiatives. Here's a peek at how we're doing today.

#2

National rank for energy efficiency in 2020, bested only by California.

Portion of total greenhouse-gas emissions generated by residential buildings.

24%

6,827

Number of LEED-certified professionals, as of 2019.

22,000

Approximate number of zero-emission vehicles sold between 2011 and 2019.

100,000+

NUMBER OF SOLAR-POWERED PROJECTS, AS OF 2019.