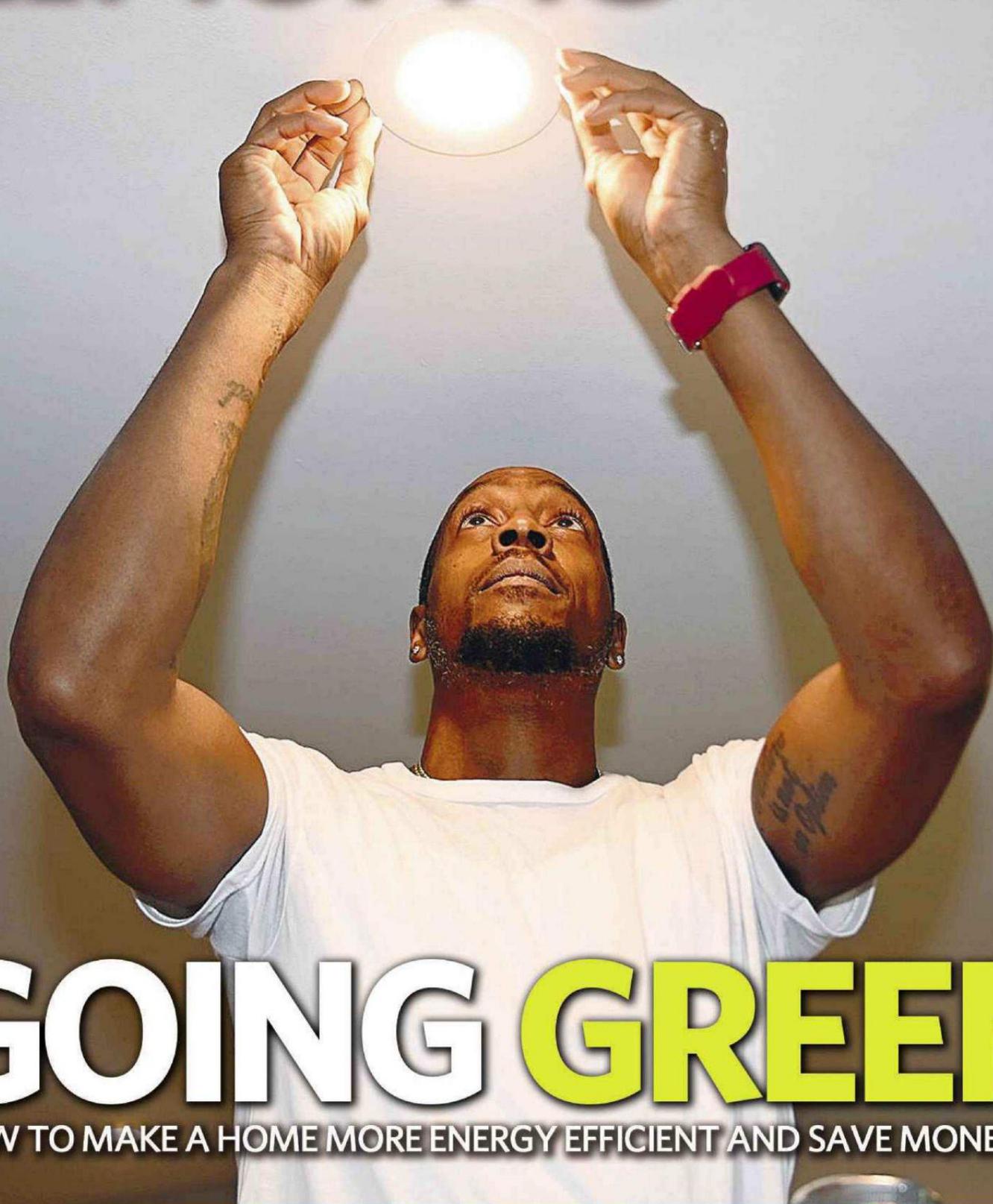


L|home

Builder Toyé Lane renovating a house in Shirley that is energy compliant.



GOING GREEN

HOW TO MAKE A HOME MORE ENERGY EFFICIENT AND SAVE MONEY C6

Good for the wallet

Homeowners are taking steps toward greener homes

BY LIZA N. BURBY
Special to Newsday

When Nasaun Lineszy of Miller Place bought his three-bedroom, two-bath Colonial last year, as a first-time homebuyer he was interested in its green features — geothermal and solar panels — because as a single person he was worried about the monthly utilities cost.

“I had the money to get the house, but I wanted to offset the monthly mortgage, which is why this helped out,” said Lineszy, 30, who paid \$512,000 for the home, which is in a certified green homes development. “My house is fully electric, meaning anything I need for power is run off solar, and with my geothermal heating and cooling, that’s also being powered through electricity.”

The result is a minimal utility bill: as low as \$14 a month in the summer to \$100 to \$300 a month in the winter. While cost was his priority, Lineszy, 30, who is in the Air Force, says the benefit to the environment has also become a “secondary but necessary” goal.

Energy costs were also a concern for Rob and Ann Steels of Lloyd Harbor, but their foremost priorities were environmental and health benefits. They tore down their home and started a complete rebuild in 2016 with features such as 2-foot-deep walls that have 20 inches of insulation, an on-site wastewater treatment system, and heating and cooling from a geothermal system. The home was completed in 2020. The couple — Ann works in banking while Rob built the house — would like to have it designated a passive house, a construction concept that focuses on low-energy consumption and indoor air quality. They’re working on getting the certification from the Passive House Institute.

Rob Steels said that while he



Rob Steels points out the external automated solar blinds on the green home he had built in Lloyd Harbor.

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expected his new, energy-focused construction to cost about 20% more than a typical new build, costs increased as he added features focused on building a healthier, more comfortable home, as well as one that is more energy efficient.

He said the family paid about \$1.2 million for the original house but declined to give specific costs on the final project.

“There are huge environmental benefits for having a passive home,” Rob Steels said. “But there are also significant health benefits in the way the house is designed and all the fresh air that’s continually coming in. I thought this was the right thing to do environmentally. I also felt the way energy is going, we can avoid the effect by minimizing our need for it.”

Those concerns among buyers and homeowners about how much it costs to run a house, including oil and electric, as well as how to put less of a strain on

the environment, are increasingly becoming equally important, said Deborah Pirro, a real estate salesperson with Daniel Gale Sotheby’s International Realty in Westhampton Beach.

It’s also making them more savvy about their options. “It has become more common in recent years for buyers to be educated about green features because they want to feel good about what they’re doing for the environment,” Pirro said.

Whether you’re a current homeowner or a potential buyer, there are simple steps to take toward a greener home that are both good for your wallet and the environment.

HAVE THE HOME EVALUATED

The most important environmental feature to buyers in all regions of the country is the cost of heating and cooling, according to a 2021 National Association of Realtors report.

If you’re in the market for a

home, even if it doesn’t yet have green features, start with the inspection phase to look for potential energy-efficient improvements, advised Desirée Madison, branch manager at Contour Mortgage in Garden City. A typical inspection for a 3,000-square-foot house is \$550.

“The report tells you everything there is to know about the house, from the age of the boiler to the air conditioning system to the condition of the windows,” said Madison, who also recommends asking the seller for the monthly electrical and heating costs.

She said this inspection can help you to make green plans. “For instance, if you know the oil burner will need to be replaced, you can plan to switch to natural gas.”

If you’re already a homeowner, you can get an energy audit: The national average cost for one is between \$145 and \$420, Madison said. Most

people pay around \$250 for an energy audit on a 1,200-square-foot-home. At the high end is \$1,500 for an energy audit on a 2,600-square-foot home using advanced tools and methods.

SEAL THE ‘ENVELOPE’

Madison also suggests getting PSEG’s free home energy-efficiency assessment, as well as focusing on areas you know could be more efficient — such as drafty windows. Steels said the goal is to create a tight “envelope” for the house, which includes the outer walls, windows, doors and other openings. “I think if people are looking to have a more energy-efficient home, the first thing I would do is to try and make it more airtight,” Steels said.

You can upgrade your home’s envelope with energy-efficient products such as Energy Star label windows, doors and skylights, roofing, bulk insulation products, and

and environment



Toyé Lane and business partner Fanny Pina work on a house in Shirley that will have energy-saving features, many of which are easy for any homeowner to do, Lane said.

products that reduce air leaks. All can qualify for tax rebates.

There are easy changes all homeowners can make, according to Toyé Lane, 44, a builder and the owner of Life in the Lane, a Bohemia-based company that buys and restores dilapidated houses. These include LED lighting, energy-efficient appliances, low-flow shower heads and smart thermostats.

NEW GREEN FEATURES

There are also green features builders are adding to new homes that are available to homeowners:

SOLAR: Renewable energy in the form of solar panels is “one of the easiest things we can do as far as environmental impact,” said Marc Weissbach, a Merrick-based architect and member of Baiting Hollow Development Group, which is building a 30-home luxury development in Baiting Hollow with sustainable features. **Cost:** About \$3 per watt for a full system — between \$10,000 and \$25,000 for most homes.

BATTERY BACKUP SYSTEM: The next step — either with the solar panels or later — is an “electric backup in which the excess solar can be harnessed within your home and you could have it available to use when there’s either peak demand or during a power outage,” Weissbach said. **Cost:** About \$15,000 depending

on how many kilowatts the home needs.

SMART ELECTRIC PANELS: This step allows you to prioritize the circuitry or loads within the home, such as the air conditioning versus the lights, and can be controlled via an app. **Cost:** About \$3,500, plus labor, as it requires an upgrade or replacement of the existing circuit breaker panel.

ELECTRIC CAR CHARGING STATION: As more people buy electric vehicles, Weissbach said these will become standard in new home construction, though he added it’s a high-watt output, about 240 volts, like a clothes dryer. **Cost:** About \$3,000 for an electrician if you’re retrofitting. It depends on the distance from, and access to, the circuit breaker.



“My house is fully electric, meaning anything I need for power is run off solar,” Nasaun Lineszy said of his Middle Island home.



Rob Steels with the insulated water tanks in the mechanical room in his house, which is heated and cooled by a geothermal system and also has 2-foot-deep insulated walls.

WINDOWS: These are the next frontier in technology with smart materials such as dynamic glazing, which impacts internal temperature and light. “The glass is programmable so it automatically dims and brightens with the light outdoors,” Weissbach said. “There are also photochromic materials similar to sunglasses, and electrochromic glass, which uses small quantities of electricity to cause

that change in the transparency or translucence.”

Cost: Smart windows range from \$50 to \$100 per square foot compared with \$10 to \$15 per square foot for regular glass.

INSULATION: If your house is leaky, Lane recommends sealing with spray-foam insulation. “It saves on heating and helps with moisture getting inside,” he said. “It holds a lot better than the fiberglass insulation in most homes and can last more than 80 years.”

Cost: For 1,500 square feet, the foam is about \$1,200; labor is \$3,000 to \$5,000.

GEOTHERMAL HEATING AND COOLING: Art Wilson, of Ridge-based AJW Home Consultant, built Lineszy’s home with this system. A geothermal heat pump relies on a well dug on a homeowner’s property to draw water that is converted into hot or cold air and hot water within the home.

Cost: About \$10,000 to \$15,000 to dig the well and bring it to the house, plus \$200 to hook it up, depending on existing ductwork and size of the home.

For most of these green features, Wilson recommends waiting until your existing units are coming to the end of their natural life. Then consider replacing them with eco-friendly options.

Rebates, mortgages and incentives

If you’re a homebuyer, Desireé Madison suggests looking into conventional and government loans with an energy-efficient model. These include Fannie Mae’s HomeStyle energy mortgage; Freddie Mac’s GreenCHOICE mortgage; the Federal Housing Administration’s energy efficient mortgage program, and the U.S. Department of Veterans Affairs mortgage. Borrowers can contact their tax preparer or accountant for more information.

If you already own a home, there are numerous Energy Star label upgrades through the U.S. Environmental Protection Agency and U.S. Department of Energy that qualify for tax credits for central air conditioning, air-source heat pumps, gas, propane or oil boilers, advanced main air circulating fans and water heaters.

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