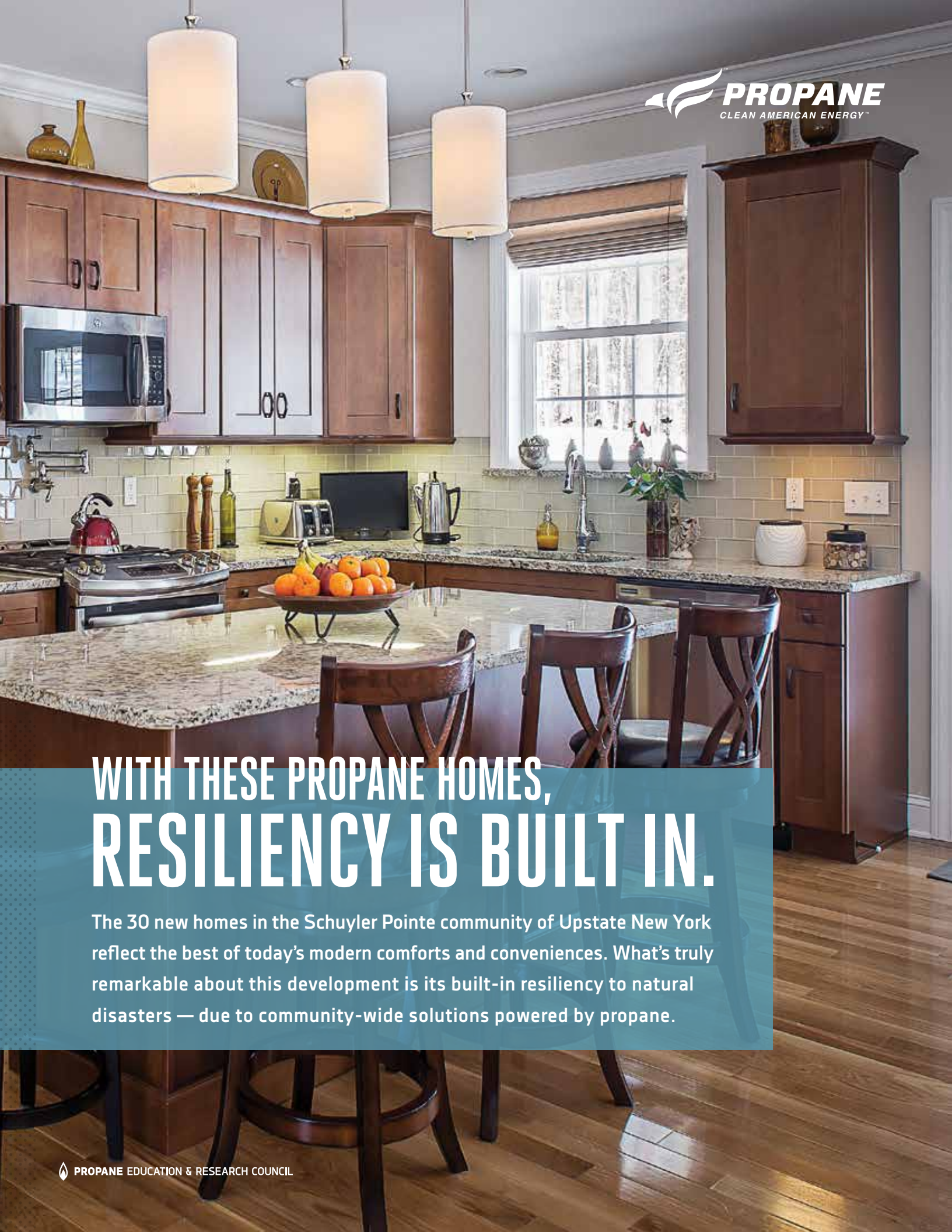


WITH THESE PROPANE HOMES, RESILIENCY IS BUILT IN.

The 30 new homes in the Schuyler Pointe community of Upstate New York reflect the best of today's modern comforts and conveniences. What's truly remarkable about this development is its built-in resiliency to natural disasters — due to community-wide solutions powered by propane.

BUILDING FOR HOME RESILIENCY

Schuyler Pointe is the perfect example of a community that can benefit from housing resiliency. That is, a home's readiness to withstand and quickly recover from disasters like hurricanes, power outages, and flooding. The area was hit by Hurricanes Irene and Sandy, which together caused over $32.8 billion in damage and left 2.2 million people without power in the northeastern U.S.

Saratoga Builders, the award-winning custom builder behind Schuyler Pointe, strengthened the community's resiliency by incorporating several propane-powered building systems into the development. Considering the impacts of Irene and Sandy — not to mention blackouts in the area throughout the year — Schuyler Pointe homeowners can benefit greatly from the enhanced safety provided by a suite of resilient features. The solutions are well-suited for homes priced at roughly $300,000 that are 2,200 square feet or larger.

Making resiliency a priority in the building stage will improve a home's chances of weathering disasters, power outages, or other hazards. While a regional resiliency initiative can influence community planning and infrastructure, there are also many resilient solutions available for individual homeowners who want long-term value and peace of mind from a home.

RESILIENCY IN SCHUYLER POINTE

The key resilient technologies in this community are all powered by propane. Why? The fuel itself is easily portable and can be stored on-site in the community.

PROPANE ENERGY

Propane provides reliable, on-site, on-demand energy. It is versatile, providing electricity, space heating, water heating, cooking, and even the home's water supply.

Specs

- 500-gallon storage tank.
- Homeowners may choose to bury the tank and landscape around the access head to preserve their yard's appearance.

WHY HOMEOWNERS LIKE IT

The lots in Schuyler Pointe are larger — approximately one acre — to accommodate drilled wells and septic systems. The spacious lot size is a major draw for homebuyers. But because they must rely on an electrically powered pump to supply water to the home, many have chosen to add a propane-powered backup generator to ensure uninterrupted water delivery during a power outage. These homeowners get the best of both worlds: larger lot size and peace of mind provided by propane.

WHY BUILDERS LIKE IT

Schuyler Pointe Builder Dan Barber chose propane because natural gas access would have required a costly three-mile line extension, which "wasn't an option." Barber didn't consider heating oil for the development because of "cost and the limited availability of efficient heating products and appliances."

WHOLE-HOUSE BACKUP GENERATOR

The moment grid power goes down, the generator kicks in to keep a home running.

Specs

- 7-17 kW.
- Powers 80-100 percent of a home's needs.
- Includes weekly automatic self-check feature.

WHY HOMEOWNERS LIKE IT

"We used to live on a farm and would lose power for a day or two. Our new house has a generator, which is there when you need it."

Joe Clough
Schuyler Pointe Homeowner

HIGH EFFICIENCY FIREPLACE

All the ambiance and warmth homeowners want, even when power is down.

Specs

- 20.2-30.8 kBtu/hour capacity.
- Offers 78 percent heating efficiency.
- Direct venting for good indoor air quality.
- Advanced pilot ignition system lights the pilot only when needed — even during power outages — when supported by a battery backup system.

WHY HOMEOWNERS LIKE IT

"I've been using the fireplace a lot this year. I use it during the day to heat the entire home, so the furnace only comes on a few times."

Dave Dowling
Schuyler Pointe Homeowner

HIGH PERFORMANCE THERMAL ENCLOSURE

Insulated, air-sealed walls keep the home comfortable for long periods of time on cold days or during power outages.

Specs

- Grade I insulation inspected by third-party verifier.
- R-38 attic insulation package.
- Energy Star-rated windows.
- Exterior walls insulated to R-21.
- Detailed air sealing at framing joints, window openings, etc.

WHY HOMEOWNERS LIKE IT

"The house has been very comfortable this winter. I can put my hand two inches from the window and barely feel a heat change."

William Witty
Schuyler Pointe Homeowner

TABLE 1: ENERGY PERFORMANCE COMPARISON OF SCHUYLER POINTE HIGH PERFORMANCE PROPANE HOME TO HEATING OIL/ELECTRIC BENCHMARK ~2,000 FT² MODEL ON FULL BASEMENT

	Propane High Performance/ Resilient Home	Heating Oil – Electric Benchmark
HERS Index	46	57
Heating System	95 AFUE Propane Furnace	Typical 83 AFUE Oil Furnace
Annual Heating Cost*	$1,836	$2,038
Water Heating System	Propane Tankless @ 0.95 EF	Electric 50 gallon @ 0.90 EF
Annual Water Heating Cost*	$367	$747
Total Annual Energy Cost*	**$3,769**	**$4,423**
$ Savings		**$654**

*Energy Cost Rates, based on 2013 U.S. Energy Information Administration data: $.019 Electric (kWh), $2.85 Propane (gallon), $3.77 Heating Oil (gallon)

ADDITIONAL HIGH PERFORMANCE SOLUTIONS

Schuyler Pointe homeowners can choose to bolster their home's resilient features with a variety of other high-performing components — many of which are powered by propane for better comfort, savings, and faster payback. Features in these Energy Star-certified homes include:

HIGH EFFICIENCY PROPANE FURNACES

Available models feature efficiency levels of 92-95 AFUE and direct venting.

PROPANE COOKING APPLIANCES

83 percent of Schuyler Pointe homeowners chose to cook like the pros by opting for gas stoves and ovens. In addition to providing excellent heat control and instant-off features, propane ranges can also be used during power outages.

LIGHTING AND APPLIANCES

High efficiency CFLs and LEDs, along with Energy Star-certified appliances, ensure that all energy loads in the home are the best they can be.

PROPANE WATER HEATERS

Several homeowners chose to install tankless models, which provide ample hot water (more than seven gallons per minute), 9-16 square feet of added floor space, and extremely high-efficiency operation (0.95 Energy Factor). Likewise, the storage tank propane water heater — a 50-75-gallon unit — is also a strong value, providing more than 70 gallons of hot water per hour when fully charged.

By taking advantage of these additional systems, homeowners enjoy better performance from their appliances and save more money. Review Table 1 to see the dramatic contrast in costs between propane and electricity and heating oil.

POWERING BETTER ROI WITH PROPANE

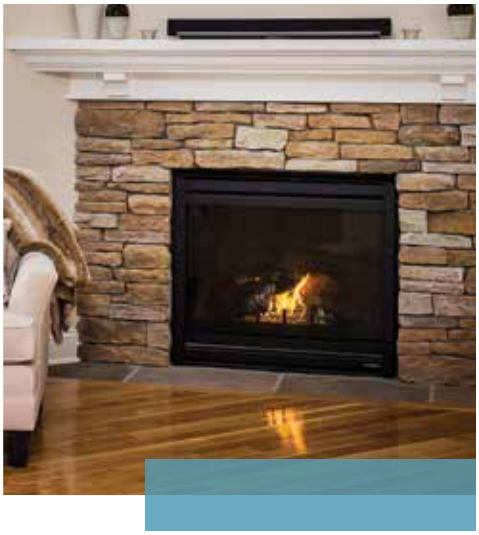
The superior performing systems in Schuyler Pointe homes require a higher upfront cost than conventional technology, but they're more than worth the investment.

Using Energy Star-certified systems will generally cost $2,000-$3,000 more than the same house built to the minimum 2009 International Energy Conservation Code (IECC).

TABLE 2: REBATES/INCENTIVES SUMMARY FOR SCHUYLER POINTE HIGH PERFORMANCE HOMES			
Program	**Sponsoring Organization**	**Incentive Amounts**	**Schuyler Pointe Incentives**
Low-rise Residential New Construction Program (ENERGY STAR)*	NYSERDA (New York State Energy Research and Development Authority)	ENERGY STAR Version 3.0 compliance: $2,000 ENERGY STAR Version 3.1 compliance: $3,000	$2,000
Propane Energy Pod Builder Incentive Program	PERC (Propane Education & Research Council)	Full Comfort & Efficiency: $1,500 Essential Needs: $1,000 Strategic Application: $750	$1,500
Total			**$3,500**

*For more information visit: nyserda.ny.gov/Contractors/Become-a-Contractor/New-York-ENERGY-STAR-Certified-Homes

**For more information visit: buildwithpropane.com/builderincentive



For the Schuyler Pointe area, Energy Star estimates the added cost is around $2,350 for a combination gas/electric home. For simplicity, Table 2 assumes that the added cost for the high efficiency features (upgraded furnace, water heater, building enclosure, and appliances/lighting) is $3,000 — the point at which builders can qualify for incentives. Participating in these programs could completely offset the added costs. For example, the incentives amounts are actually $500 greater than the added costs.

Homeowners benefit from the strong ROI of propane homes, too. Assume a homeowner pays $4,000 more for high performance components. When rolled into his 30-year mortgage (at a 4.5 percent fixed rate), he'll only pay $20 extra on his monthly mortgage. Not to mention, the reduced energy costs will save that homeowner approximately $40-$50 each month.

REDUCED ENERGY COSTS WILL SAVE

$40–$50 EACH MONTH

ADVANTAGES FOR SARATOGA BUILDERS

Saratoga Builders leverages the Energy Star brand in its marketing materials for Schuyler Pointe, in addition to promoting the high-comfort amenities homeowners dream about. And because any hard costs of the advanced technology have already been offset, Saratoga Builders can market its homes at more attractive prices for buyers.

Above all else, Saratoga Builders takes pride in building resilient, high-efficiency homes its customers can enjoy for a lifetime. That's why, at Schuyler Pointe, propane is a perfect fit for the community.

FOR MORE INFORMATION

To learn more about building with propane, or the Propane Education & Research Council, visit **buildwithpropane.com**.

Propane Education & Research Council / 1140 Connecticut Ave. NW, Suite 1075 / Washington, DC 20036
P 202-452-8975 / **F** 202-452-9054 / propanecouncil.org

The Propane Education & Research Council was authorized by the U.S. Congress with the passage of Public Law 104-284, the Propane Education and Research Act (PERA), signed into law on October 11, 1996. The mission of the Propane Education & Research Council is to promote the safe, efficient use of odorized propane gas as a preferred energy source.

PROPANE EDUCATION & RESEARCH COUNCIL