

YOU'RE KIND OF A

BIG DEAL

Uncover the true impact you can make in your world

## Money back? Yes, please!

Home improvements that come with financial incentives

SMART LIFESTYLE, CURATED FOR YOU BY BGE AND EMPOWER MARYLAND



# Open. Wash. Style. Close. Find one more way to trim costs.

When you run a small business, every cent counts. BGE is here to help you save, starting with an energy efficiency analysis, available at no additional cost to you. It's money for the taking. And one thing off your plate.

**Sandra T., Owner** Flair Hair Salon Baltimore Flair



EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money. To learn more about EmPOWER and how you can participate, go to **BGESmartEnergy.com**.



To schedule your energy analysis or to learn more, visit **BGESmartEnergy.com/SmallBusiness3** or scan the QR code.

I'm always grateful for the opportunity to work with such an amazing team. And I'm grateful for the continual learning opportunities that my job offers. Over time, I have gained knowledge about various concepts, including the importance of "energy resilience."

Officially, it's defined as "the ability of the grid, buildings and communities to withstand and rapidly recover from power outages and continue operating with electricity, heating, cooling, ventilation and other energy-dependent services." That's a mouthful. But, in this issue, we unpack what it means, with tips for you and your home.

Personally, I see it as more of a philosophy. Simply put: "Be prepared." This form of resilience is all about preparation. I get to exercise

# **MY "BE PREPARED"** PHILOSOPHY

that level of planning at work. And I have begun to do the same at home. I began to take a closer look at my energy use and the various devices in my home that could help me up my preparedness game.

FROM THE EDITOR'S DESK

For example, I started with yearly maintenance of my heating and cooling system and making sure my devices are surge protected. I swapped out my old power strips for the latest smart power strips that protect my devices while preventing unnecessary power drain by devices that are plugged in but not in use. My big takeaway was realizing that energy efficiency can be yet another facet of preparedness. I had already stepped up my efficiency game with two crucial changes—a Quick <u>Home Energy Check-up</u> from BGE and upgrading to ENERGY STAR<sup>®</sup> certified appliances. I'm considering air sealing my home and adding insulation as well.

One of the more enjoyable moments was when one of my kids came home from

school talking about how they had just learned about the Earth's climate and the impacts energy use can have on it. And because of my work here at BGE, I was able to enjoy a moment talking about the subject. We had some real common ground, and my kid's interest and excitement about the subject was contagious.

With every move I've made toward better energy resilience, I've had a greater sense of calm that comes with the peace of mind knowing I am better prepared for the unexpected. And that's a philosophy that came from my father, who always used to say, "There's no substitute for daily preparation."

CEAQ

**ERIC A. RIOPKO** MANAGER. **ENERGY EFFICIENCY PROGRAMS BALTIMORE GAS AND ELECTRIC COMPANY** 





#### SENIOR EFFICIENCY **PROGRAM MANAGER**

Amey loves a good home improvement story. Especially those that end with energy savings. Ask her about HVAC systems, smart thermostats or home energy audits, and buckle in. Amey's here for it all, and she can't wait to see what the future holds.

Ben knows firsthand how energy efficiency can put older homes on a path to new life. He saw it early in his career as a home retrofitter. He now sees it in the smiles of people taking control of their energy use and finding a new reason to love their homes.



#### CONTRIBUTORS



#### **BEN SCHOTT**

#### SENIOR EFFICIENCY **PROGRAM MANAGER**



#### **CYNTHIA EDWARDS**

#### SENIOR EFFICIENCY **PROGRAM MANAGER**

Cynthia approaches life with a curiosity mindset. What's she curious about these days? How innovations in the rapidly changing world of appliances will revolutionize the energy efficiency of the products we rely on every day.

#### THE EFFICIENT HOME 3

# CONTENTS



**6**. THAT TIME OF YEAR **PROTECT YOUR CASTLE** 



**12**. тне тоу вох YOU HAVE THE (BACKUP) POWER

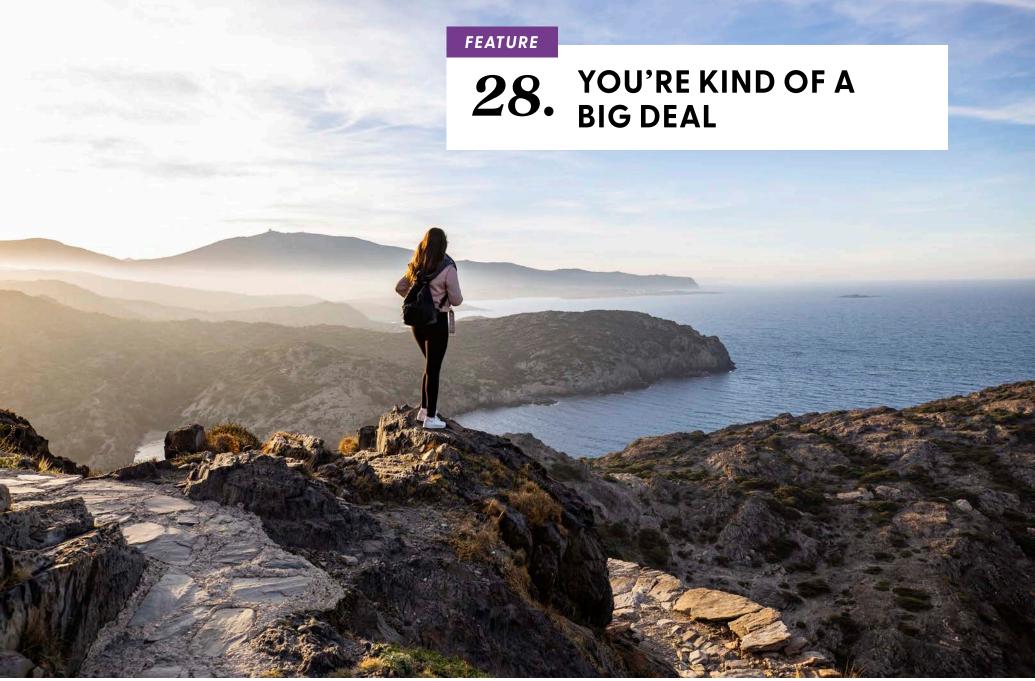


18. TREND WATCH GEN Z HAS EARNED THE TITLE OF GEN E



**24**. YOUR ENERGY. YOUR MONEY. MONEY BACK? YES, PLEASE!

| LEAVE YOUR (THERMOSTAT) WORRIES BEHIND | 40. |
|--|-----|
| YOU'VE GOT THIS                        |     |
| TALES OF A HOME ENERGY EXPERT          | 36. |
| WHO DID IT BEST?                       |     |
|  |     |



THE EFFICIENT HOME / 5

# PROTECT YOUR CASTLE

You can guard your home against an unexpected loss of power. When you do, you're practicing energy resilience. This term "energy resilience" might be new to you, like "drip" or "rizz" or resin-based clogs. We'll catch up on these other trends at another time. For now, let's focus on the term itself. According to the U.S. Department of Energy. energy resilience is "the ability of the grid, buildings and communities to withstand and rapidly recover" when power goes down. In this article, we'll take this concept and put it to use in your home.

THE EFFICIENT HOME



#### It's time to get defensive

The best way to wrap your head around the idea of energy resilience is to think of your home as a castle with a protective moat. When things get out of hand outside your castle, you raise the drawbridge by using the energy resilience tools you've adopted in your home. Yes, in this analogy, you not only have a castle but a moat, too. Cool, right? The point of this comparison is to develop a certain amount of energy self-sufficiency and to have that level of preparation to make you feel like you're safer and more secure in your home.



#### Cover your ... self

Did you ever use a magnifying glass to burn a piece of paper? Well, imagine your window is the magnifying glass and the paper is your home. A <u>recent study</u> found that 75% of window coverings remain in the same position daily. Don't let this happen to you. Be the other 25%. That direct sunlight magnified through glass can really heat up a home. Keeping any window covering closed during the summer is a great opportunity to save with things you already have in your home.

Better yet, instead of blocking the sun, you could harness its power through solar panels an effective way to generate electricity during the sunny summer months and year-round too. Also, you can score <u>up to a 30% federal tax</u> <u>credit</u> for installing qualifying solar panels.\*



\*Please contact a tax professional or certified public accountant to confirm details specific to your qualifications and eligibility.

# Thermostat? Or energy efficiency secret weapon?

When the leaves turn and the air gets crisp, you can embrace tactics to reduce your energy usage and increase your energy resilience. Managing your thermostat is a simple way to gain an advantage. During the day, set the thermostat as low as your personal comfort will allow—don't be a hero on this one. Dropping just a few degrees can make a difference. No one needs to be walking around in parkas or anything.

Now, when you hit the sack, that's when you can really save. It turns out the <u>best temperature</u> for sleep is roughly 65°F. And setting your thermostat to that temp at night can really help you save. Do you like money but hate ... doing things? Well. All of this adjusting can be done automatically with a <u>smart thermostat</u>. This ingenious device not only can be programmed to do your temperature bidding, but many models can also learn your habits—like when you typically go to bed—to help you save. Don't have one? No worries. You could be eligible to have one installed at no additional cost when you book a <u>Quick Home Energy Check-up</u> with BGE (more on that in a minute).

Another timely trick for the fall is sealing air leaks in your home. Gaps in your windows, chimney and recessed lights can be your three main culprits. One simple trick is to use a very high-tech leak detection device—tissue paper. Simply hold the tissue paper near potential air leaks. If the tissue moves or flaps, you've got a gap to be filled. Once you find one, seal that sneaky airflow with caulk and weather stripping.

If you want to step up your air loss detection game, you can schedule a <u>Quick Home Energy</u> <u>Check-up</u>. A pro will walk through your home to check for air leaks and much more.





#### CURIOUS ABOUT SMART THERMOSTATS

Learn more and get a rebate up to \$100 on qualifying models. Visit **BGESmartEnergy.com/Smart3**.

9

#### THAT TIME OF YEAR

# Don't look now, but your home is leaking

Our friends at the U.S. Environmental Protection Agency estimate that 15% of your heating costs are lost to improper air sealing and insulation. The truth is, if you add up all the leaks in the average home, it would be equal to having a window of your home open every day of the year. Morning, noon and night—spring, summer, winter and fall—you are losing money.

# **15%** of heating costs are lost to improper air sealing and insulation.

So, when the temps take a nosedive, it's the perfect time to step up your energy resilience game. Let's start with insulation. Adding insulation will do more than warm your home. It'll warm your heart. You'd think it was the love of family and friends, but you'd be sadly mistaken. It's insulation. It's always insulation.

We can also talk about strategically planting deciduous trees on the south-facing side of your

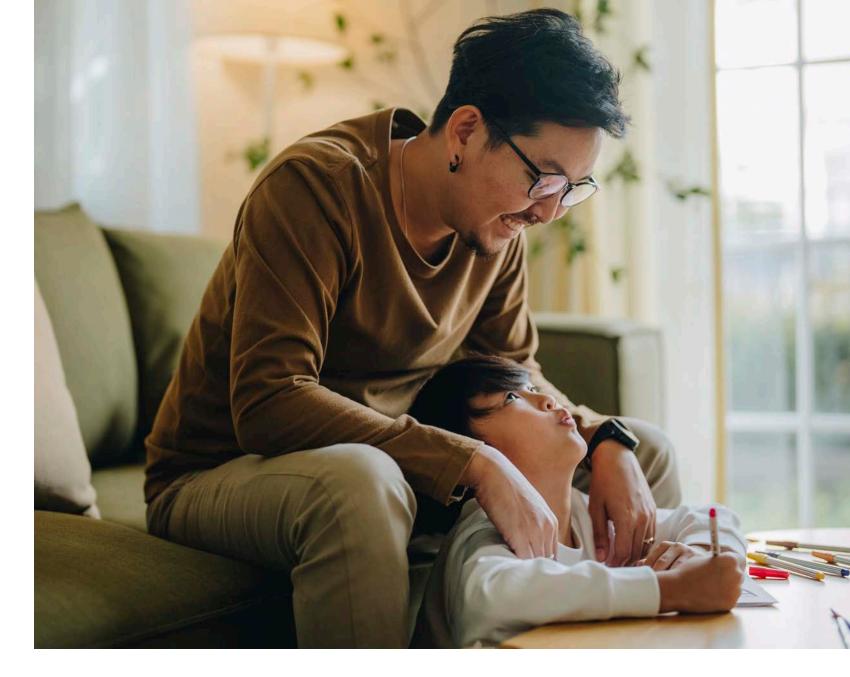
home. A quick trick to determine which side of your home is facing south is to use the map application on your smartphone. Planting trees on that side can provide shade in the summer and let the sun better heat your home in winter. But again, you have an entire (figurative) open window right now. Go fix that first.

# It's your air. Control it.

It's nature's season of rebirth. Green shoots of what will soon be grass begin to pop out of the ground, and we get the return of Pollen Season.

Spring is the perfect time to manage the air, and more specifically, the airflow in your home. You can turn off ceiling fans when you leave the room—they are there to cool you, not the room. So, if you're not in the room, there's no need for the ceiling fan to be on. Use the bathroom fan when showering or taking a bath to remove excess heat and humidity from your home.

The biggest difference you can make when better managing your air during these months is with your heating, ventilation and air conditioning (or HVAC) system. When it's working at its best, you can save energy and money. Generally speaking,



about <u>43% of your bill</u> goes to heating and cooling. One great way to manage this factor of your energy resilience is to schedule an <u>HVAC Tune-up</u>. The Tune-up can not only make your home more energy efficient, but your air quality can also improve—see Pollen Season above—and your overall comfort can increase. And, if you were digging the idea of getting your hands on a smart thermostat, booking an HVAC Tune-up through BGE is another great way to do just that. Oh, and as a BGE customer, your Tune-up and the smart thermostat are available at no additional cost.



In fact, an HVAC Tune-up can help you identify up to 95% of costly breakdowns before they happen. Talk about improving resiliency. So, you're catching 95% of potential issues while saving 100% of the cost of finding 95% of those issues. That's the math.

To sum up, energy resilience can be a holistic and impactful weapon when battling the elements year-round. By adopting these and many more tactics, you can not only save energy and money but also be a part of building a more sustainable and climate-resilient future. It's the perfect option for your castle and your moat. THE TOY BOX

# vou have the backup bookers

Heavy winds, icy tree limbs, equipment failure—potential causes of a power outage are as varied as they are unpredictable. Energy resilience, or the ability to withstand and rapidly recover from a power disruption, doesn't just happen. Together, we can learn how to boost your energy resilience because, frankly, that's what good neighbors do.

In that spirit, here are a few toys to help you fortify your energy supply to withstand storms and other emergencies.



# Old- and new-school power generation

First, let's go old school with an option that will be seen more as a tool than a toy. A portable generator is a budget-friendly option that requires some maintenance, including setting up and refueling your generator. A portable generator won't power your entire home, but it can provide enough juice to ensure you don't end up with a fridge full of room-temperature foods. By making sure your generator is connected to your sump pump, you can help avoid ending up with a flooded basement too. That's energy resilience in its simplest form.



#### THE EFFICIENT HOME / 13



Your other option is a new generation in power generation. A home standby generator is the best combination of peace of mind and convenience. Unlike portable generators, standby generators are installed with a consistent fuel supply of either propane or natural gas and can be set to automatically turn on if the electricity goes out. Some of these generators even allow you to control them using your smartphone.

A home standby option uses an installed generator, which is much more convenient compared to a portable option. Choose the standby generator and say goodbye to running extension cords to a handful of lights, a fan and the refrigerator. You also won't be running out into the elements every eight hours to refuel your device.

Now why would you choose the portable option over the much more convenient home standby alternative? Price. While very convenient, a home standby generator can be thousands of dollars more. So, if you have a smaller place and don't mind the maintenance, you can still get added energy resilience without making such a major investment.

Recently, you've had a third option in a power station. Perfect for smaller homes, think of a power station as a microwave-sized, 22-pound rechargeable battery. It won't have the noise of a portable generator. And it won't have the steep price tag of a standby generator. It kind of sits in between the two in affordability and convenience. The only real drawback for a power station is that you'll eventually need to recharge your battery. Some come with a solar option to solve that problem in a pinch.

# Bring in a pro

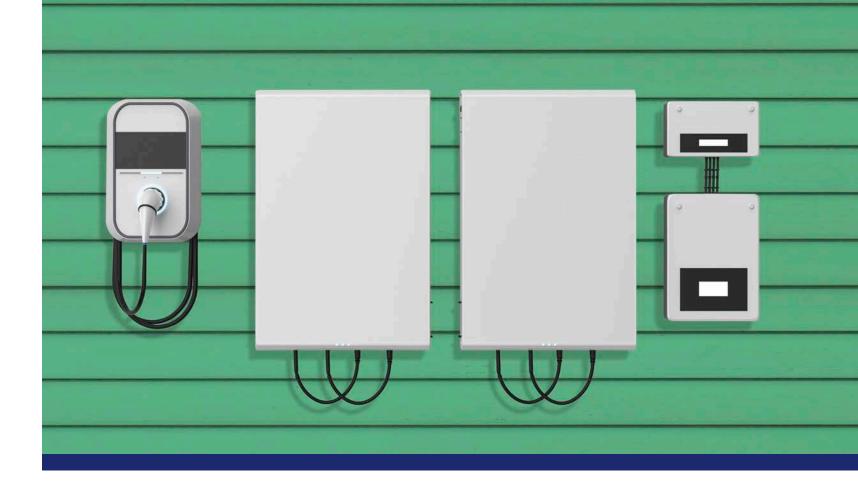
If you want to up your energy game, a home energy audit is a great way to shed light on opportunity areas in your home. Your home performance auditor will use several high-tech "tools." You may classify them as "toys" because they are incredibly cool, but it'd be best to keep that to yourself. They will use infrared imaging to study your insulation levels and use a blower door test to evaluate your home's airtightness and pinpoint leaks. And they will combustion test your gas appliances, among other assessments—all of which can improve your energy efficiency and your safety.

Now, this option involves a \$100 charge, but the service is valued at \$400, and you can get rebates averaging about \$3,000 toward your recommended efficiency-boosting projects.



You can sign up for an energy audit at **BGESmartEnergy.com/Audit3** or by scanning the QR code.





# **Calling for backup**

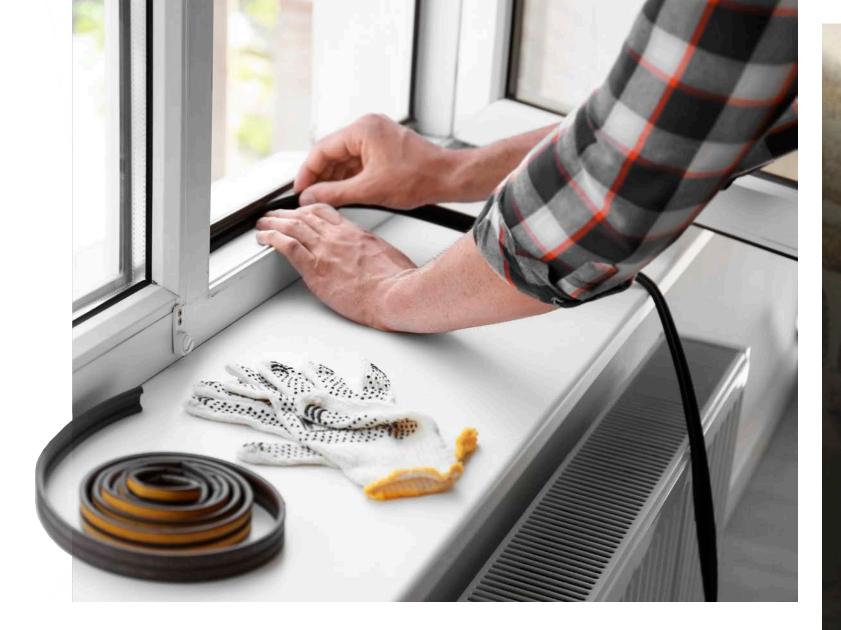
Have you ever gone on a trip with a little cell phone backup battery? It's a confidence builder. You check your email, research your destination and watch all the cat videos your heart desires, all without worrying whether you'll run out of juice. That's how a backup battery for your home can make you feel.

Residential battery storage systems help make your home less dependent on grid power. These systems enable you to supply backup power to your home regardless of the weather or time of day. This resilience is one of the main reasons some homeowners opt for energy storage.

Battery backup systems also boast a higher energy capacity than standard generators. This means you can maintain your home's electricity for longer during prolonged power disruptions. You can also find a system with an automatic transfer switch, making an outage virtually unnoticeable to you and your family.

If you really want to celebrate a higher level of energy independence, consider upping your battery game by pairing your battery with solar panels. This move can help you reduce your electricity costs too. For example, you can recharge your battery with solar panels during the day and then use the stored energy during peak energy hours in the evening. This system will also allow you to charge and use your mobile devices worry-free at home, so your cat-video viewing will never be threatened.

With that being said, you can also use smaller backup batteries for your personal devices, like a smartphone or tablet. We know, we know. These smaller batteries don't have the impressive "toy" factor that a giant battery backup system has, but these smaller batteries don't come with the giant backup price.



# Seal the deal

By sealing air leaks and adding insulation, you can bolster your home's comfort, and you could save up to 11% on your energy costs. And you can do this by buying a caulk gun. This sucker can really turn up the "toy factor" when working. First, you need to admit you've already played with one of these things as a kid. They are fun. They are cool, but let's not get carried away.

You can start by finding air leaks in the attic, around the foundation and along windows and doors. You can seal these leaks by installing weather stripping around windows and doors

and caulking around the foundation. You can add insulation in your attic, crawl spaces and basement walls, as well as to the floors above an unconditioned basement. It's a relatively quick and easy way to boost your energy resilience.

In short, your home is your castle. Protect it. When you increase your energy efficiency, you can increase your resilience, your savings and your peace of mind. You never know. After all your preparation, you could actually look forward to the next big weather event.

Or not. Probably not. But you will have more confidence knowing you've taken steps to safeguard your home, and your energy.



bge<sup>™</sup>

AN EXELON COMPANY

leaking money."

You may even qualify for a smart thermostat. And it's all available

at no additional cost to you.

An HVAC Tune-up is a great way to keep your equipment running at peak performance. It could help you save on energy and avoid a costly breakdown.

> Request an appointment today. Visit BGESmartEnergy.com/Tuneup3 or scan the QR code.

EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money. To learn more about EmPOWER and how you can participate, go to **BGESmartEnergy.com**.



TREND WATCH

# has earned the title of Gen E

That "E" is for the "environment." For these folks, it's a priority. According to the <u>Pewy</u> <u>Research Center</u>, Gen Z is more active than any other generation in talking about climate change—and not just online. They're more than willing to talk to folks face to face about the needs of the environment—no screens required. This is even more impressive when you realize that this is the first generation to spend their entire lives in a digital world. Technology is more than second nature. Technology is fundamental to their existence.

#### TREND WATCH

## When it comes to the planet, the numbers don't lie

The very <u>same report</u> from the Pew Research Center reveals that 62% of Gen Z shoppers buy from sustainable brands. Even more surprising, 73% are willing to pay more for sustainable products. That survey also revealed that 67% of Gen Zers believe that the climate should be a top priority.

They make the environment part of who they are. Gen Z believes that addressing climate change is their top personal concern more than any other generation.

And they do something about the climate. More than any other generation, they've taken personal action (such as donating money or volunteering) to help address climate change.

# of Gen Zers believe that the climate should be a top priority.

## **Rules? What rules?**

Just out of college, Gen Z has already experienced so much in their lives; the recession of 2008 and the pandemic shaped their worldview. They were also primarily raised by Gen X to be independent and able to figure things out for themselves. This enables Gen Z to produce without constant reinforcement. All of this encourages them to question everything.

> They will bring a fresh set of eyes and ask questions others may have avoided, like, "Why do we do it this way?" and "Why don't we challenge the status quo?" It's up to previous generations to listen and give them the opportunity to be tenacious, lead with passion and make a difference when it comes to the environment.

## Their high-tech, highly efficient homes

The more aptly named Gen E prefers to live in an eco-friendly, energy-efficient home. They look for features that are kinder to the environment. Those can be energy-efficient appliances, bamboo flooring and even recycled glass countertops.

There's an old saying in real estate that the three most important things about a property are "location, location, location." For Gen Z, it could be more like "efficiency, efficiency, efficiency."

OUR

HOME

This native digital generation was reared on tech, and they expect the technology in their homes to be as efficient as they are. For example, that means <u>smart</u> thermostats. These Wi-Fi-enabled devices automatically adjust the temperature in your home to save energy without sacrificing comfort. Some new users are intimidated by that level of intelligence in their homes. Not Gen Z.

#### CURIOUS **ABOUT SMART** THERMOSTATS

Learn more and get a rebate up to \$100 on qualifying models. Visit BGESmartEnergy.com/Smart3.

#### TREND WATCH

This generation has lived with technology throughout their lives, and smart lighting and smart home security are welcome additions to their homes. That's a lot of technology. How does Gen Z solve that problem? With technology, of course.

They use a smart home hub. This "one device to rule them all" approach manages all your smart gadgets with one device or operating system. It's a one-stop solution for unifying connected gadgets so you can operate them from one app.

And on a more holistic view of home ownership, Gen Z sees the value in <u>ENERCY STAR® certified</u> <u>NextGen homes</u>. These advanced homes and apartments incorporate leading-edge energy efficiency technologies and electric vehicle (EV) charging capabilities to maximize energy and emissions savings. The NextGen home just fits their beliefs better.

## Eco-friendly and on the move

Past generations have made their travel decisions based primarily on price.

Gen Z shifts that priority to support travel and hospitality companies that match their values. They research the companies, probably on their smartphones, to find organizations that support sustainable practices.

Their <u>daily travel choices</u> are also made with the environment in mind. This generation is open to simple, low-cost alternative forms of transportation like e-bikes, scooters and ridesharing.

And they are <u>more likely to</u> consider driving an EV. While an EV can save drivers

#### three to five times the cost of a

gas-powered car, the environmental impact of this choice will appeal to many in Gen Z. These EVs produce zero tailpipe emissions, are cleaner than burning gasoline and will allow you to only need a gas station for the random squeegee windshield wipe-down.

#### Hold on to your hat

In short, this generation will look the status quo in the eye and not blink. <u>They take action</u>. They are values driven, socially conscious and unafraid. Armed with the latest technologies built to save energy, Gen Z has more tools at their disposal than any generation that has come before them. Combine that with the fact that Gen Z sees a technological world as their native world, and we have a group of people empowered to make a difference.

They're the brightest generational option when it comes to a cleaner, greener environment. And that's why Gen Z should really be called Gen E.

### **DID YOU KNOW?**

More than <u>30 builders</u> have partnered with BGE to construct ENERGY STAR certified new homes right here in Maryland.

THE EFFICIENT HOME

23

YOUR ENERGY. YOUR MONEY.

# MONEY BACK? YES, PLEASE!

Yes, you'll be helping the grid. Yes, you'll be helping the planet. But you'll also be helping yourself. So technically this isn't a win-win. It's a win-win-win. You'll be able to appear amazingly altruistic while totally cleaning up.

Some might call it the Cash In on Saving Me Money Act. For the sake of this article—and because it's the actual name we're going to call it the Inflation Reduction Act. And we'll cover how you can score a boatload of tax credits and other perks for improving your home and your energy efficiency.

Yes, it's part of a goal beyond your home. We, as a country, have pledged a nationwide <u>50% reduction</u> in carbon emissions from 2005 levels by 2030. And yes, you're allowed encouraged even—to leverage these opportunities to save money in both the short term (tax credits) and the long term (energy cost savings). Let's break down your opportunities to save money by using less energy.



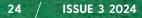


We have to toss out a warning here. When you start seeing the results—and financial incentives—of many of these improvements, you're going to want more. Sure, you start sealing a few ducts, which seems innocent enough. But ducts are what the experts refer to as a "Gateway Fix." Next thing you know, you're out trying to score deals on ENERGY STAR® certified appliances and telling strangers in line at the grocery store about the \$50 instant discount you got on your new dehumidifier. It's a slippery slope. That's all we're saying.

Let's start with something simple. This one will be great year-round but is particularly rewarding around tax time. You could qualify for up to \$3,200 annually in federal tax credits for different qualifying energy-saving upgrades. It's the perfect way to shore up your home's energy efficiency—with the added benefits of improving your comfort now and your home's resale value down the road.

And that's not the only tax-friendly efficiency opportunity. If you've been on the fence about replacing old heating and cooling equipment, here's an excellent reason to get off that fence. You could earn up to \$600 in tax credits for the following upgrades:

- → Central air conditioner
- → Gas, propane or oil heater, or water heater
- → Gas or oil furnace
- Electrical system improvements, in conjunction with other measures



Earn tax credits for more energy-efficient:

- → Windows
- ➔ Doors
- ightarrow Insulation and air sealing

We call these improvements "Double Dip" savers. Yes, you can get your tax credits. You also—and this is the double part—save throughout the life of the improvement.

And keep this in your back pocket. If your A/C is a bit old, like it-could-have-its-own-drivers-license old, you may want to look at replacing your unit. In that case, an ENERGY STAR certified central air conditioner could <u>lower your energy costs by \$541</u> over the lifetime of the unit.

So, with the \$600 in tax credits plus the \$541 in lower energy costs, you could be sitting on \$1,141 in savings. That could get you a <u>zero-gravity</u> <u>shiatsu massage chair with Bluetooth, heating</u> <u>and a foot roller</u>. Can your old air conditioner help you relax while gently shiatsu-ing your worries away? No. No, it cannot. Just keep that in mind.

Not sure where to start? We can help with that, too. BGE's Home Performance with ENERGY STAR Program can help you find the right areas for home energy efficiency improvements and learn how to lower your energy costs by as much as 20%.

You can qualify for up to

A WAR WAR AND TO THE AND THE

# \$1,200

in tax credits for qualifying air sealing and insulation projects.



Contracting Away Party

#### YOUR ENERGY. YOUR MONEY.



#### Buying an EV made EZ

You can earn up to <u>\$7,500 in tax credits</u> by purchasing a new electric vehicle (EV). Are most new models out of your price range? Fear not. You can receive up to \$4,000 for a used EV.

But wait. You can snag more savings while owning your new—or new to you—EV. For example, your maintenance costs will no longer include oil changes, spark plugs or muffler repairs. And those savings go beyond your taxes. You can save money while you sleep by charging your EV overnight at a lower rate.

Additionally, switching to an EV could net you more than <u>\$8,000 in fuel savings</u>. That means your new EV could enable you to buy 4,232 slushies on the fuel savings alone. We picked slushies as a real-world example because you may still want to visit gas stations for the refreshments—and, because, slushies.

### How to make hot water even steamier

Near the top of the list of things we rely on every day but rarely (OK, never, if we're being honest) think about is the humble water heater. Squirreled away in a dark corner in the basement or a closet, these unsung heroes of household cleanliness deserve another look—especially if yours is old enough to start middle school.

Water heaters have come a long way in recent years, particularly in terms of technology and efficiency. In fact, ENERGY STAR® certified heat pump water heaters are so efficient a typical household of four could save as much as <u>\$550 a year</u> in electric costs compared to a traditional water heater.

And you could get up to \$2,000 in tax credits.\* But wait, there's more. (Cue the sultry jazz music.) You can also snag up to <u>\$1,600 in rebates</u> from BGE and EmPOWER Maryland when you buy a qualifying ENERGY STAR model. What this all boils down to is (no pun intended), replacing your old water heater with a super-efficient model more than pays for itself over than pays for itself over its lifetime. How's that for attractive?

**\$4.315**\*

Project cost (water heater + installation)

"Sample pricing based on a standard 50-gallon heat pump water heater purchased from Product Advisor Plus at **<u>bgewaterheater.com</u>**.

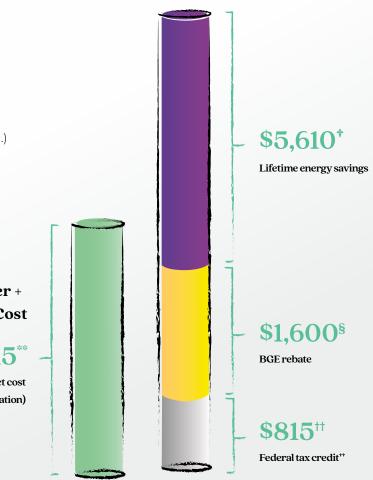
<sup>11</sup>The Inflation Reduction Act's federal tax credit covers 30% of your project cost, up to \$2,000. The tax credit is calculated based on the project cost after the BGE rebate. Please contact a tax professional or certified public accountant to confirm details specific to your qualifications and eligibility.



As with the other opportunities noted above, you're getting paid to save money. In short, making any of these energy efficiency improvements might just make you actually look forward to doing your taxes.

\*Please contact a tax professional or certified public accountant to confirm details specific to your qualifications and eligibility.

Replacing your old water heater with a heat pump model could save you thousands. Really. We did the math.



#### **Total Potential Savings**

<sup>†</sup>Savings based on a household of four compared to a standard electric water heater. Source: <u>energystar.gov</u>.

<sup>6</sup>One heat pump water heater rebate per customer address purchased after January 1, 2024. Rebate not to exceed total purchase price. Mail-in rebate is not valid if instant rebate has been received on the purchase of a qualifying unit through a participating distributor. Program is subject to change without notice.



# How tiny, ordinary changes can lead to remarkable results

Despite the likely <u>6 billion Earth-like planets</u> in our galaxy. Despite the observable universe containing around <u>300 sextillion stars</u>. Your presence here on planet Earth is significant. In fact, your actions can overcome these—quite literally—astronomical numbers by making even the smallest changes. This kind of thinking may seem counterintuitive. It may not make good math, but it does make a difference.

The truth is, every one of us is capable of being a force for good. And we're here to help you find those little things—energy efficiency and otherwise—that aren't so little once you begin to add them up. Speaking of adding things up, we didn't even know sextillion was a number. Turns out it is. And that number contains a boatload of zeros—21, actually.

# Let's get real

We're here to deliver practical, pragmatic information that will give you useful, actionable ideas. For starters, consider this: A small act like changing the air filter in your heating and cooling system isn't in itself huge. Buying one smart power strip will not result in the world throwing you a parade. The cynic will say, "That's just a drop in the bucket." And they are right. But it all really depends on the drop and the bucket. We'll help you find some acts that can collectively make the largest impact.

And never forget the value of the drop. A constant drip, over time and with dogged persistence, can drill a hole through a rock. So, let's start drilling holes.

# Good acts at home

Now that we've used them as an example, let's talk air filters. You may just change the filter so your HVAC system can run more efficiently. And that's good. A clean one can lower your air conditioner's energy consumption by 5% to 15%. That's drop one.

That clean filter can also improve the air quality in your home. Drop two. The cleaner air quality can result in a cleaner home. Drop three. That means you won't have to dust so often. And not dusting is a lot like weeding a garden or showering-people only notice if you don't do it.

# **SMALL ACTS.**

Getting back to air quality. A clean filter can promote good health for everyone in your home, especially children and older adults. That can result in fewer allergic reactions, fewer trips to the pharmacy and fewer trips to the doctor. Drop, drop, drop. So, in conclusion, good acts add up, and every time you must unnecessarily dust, you lose a little part of who you are as a human being. And no one wants that. So, it's just one filter, but it really isn't. It has a ripple effect of benefits.

And think of changing from incandescent light bulbs to LEDs. If that isn't the smallest deed you can do for your home, it is at least in the top five of small actions you can do for your home. An LED does so much more than light a room. These contraptions last longer. Today's LED

Studies have shown that performing acts of kindness can not only boost your mental health but your physical wellbeing as well."

bulbs can last up to 15 times longer than traditional bulbs. They are also cooler to the touch than traditional bulbs, reducing the risk of catching anything on fire. And, most importantly, they use less energy. Not a big deal until you see it through a larger lens, specifically a national lens. The U.S. Department of Energy projects that the energy saved by a national switch to LEDs could equal <u>348 terawatt-hours</u> by 2027. That's enough to power 33,810 homes for one year.

Many of these small acts of efficiency can be accomplished with one simple move scheduling a Quick Home Energy Check-up. From checking for insulation levels and air leakage to installing efficient-flow showerheads and LED bulbs, we can help you turn your home into the center of the energy efficiency universe.



# **Good acts** for yourself

Now, some might initially think that a good deed for yourself is selfish. They may think any action you take that helps yourself disqualifies that deed from being "good." It's not that they're wrong. It's just that they may be missing something. You must take care of yourself before you can care for others. So, let's start viewing actions for yourself as nothing short of generous. With that in mind, consider something as simple as recycling. Or taking a long walk outside and collecting any litter you find. You'll improve the look of your neighborhood (good for your community) and get a nice hit of dopamine (good for you).

The science behind good deeds is impressive. Studies have shown that performing acts of kindness can not only boost your mental health but your physical well-being as well. Good acts in a crisis, for example, give you what's been termed a "Helper's High," with surges of dopamine and endorphins flooding your brain. And here's an amazing one: Medical studies have discovered that people who perform good deeds have more immunoglobulin A-an antibody that fights off infection. Yes, displays of compassion can give you a super immune system. No, you will not be asked to star in an epic superhero movie featuring you and your magical abilities. Good acts can do a lot, but let's not start overpromising here.

This potential change in your life will create good energy. You'll start seeing the world differently, and people will start seeing you differently through your actions. And have we mentioned how you can change your filter and dust less? Not dusting should be one of your favorite deeds for yourself and your super-charged immunity.

# C WOR

There's no need to stop doing good deeds when you head out to your place of employment. You could bring doughnuts, put the dishes in the dishwasher, thank someone for their help and praise folks for their accomplishments. And since we're being all science-y, another study found that good deeds in the workplace can lead to increased communication, better teamwork, a boost in creativity and an overall sense of fulfillment. Not a bad return for doing a little good.

And your good deeds can also help your company succeed when you introduce energy efficiency

programs into your business. Because saving energy and money at work could give your profitability a boost. And your comfort. And your ambiance. Just look at our friends who made small changes that made a big difference at <u>Starry Night</u> Bakery in Timonium. They worked with BCE's Small Business Energy Solutions Program to switch out all their overhead lighting for LEDs. And now, owner Shannon Clarke says, "It's beautiful. It's so bright and gorgeous in here now." And she's saving on energy costs. No matter how much money you save with an energy efficiency improvement or two, still bring doughnuts. Because doughnuts.



# **Good** acts for others

This is easily our favorite of all the deed categories because these are the deeds that have an exponential effect. It's also so enjoyable because you will never know the good you've really done. You could donate clothes and toys to charity or give books to little free libraries or volunteer at the local nonprofit. It'll change your outlook and really make quite a difference.

Holding the door open for a stranger could be the tipping point on a complete turnaround in their day. Letting a random driver merge into your lane might make their commute. Paying for the meal of the person behind you in line at that burger joint may relieve some financial stress. Now, here's the cool part: Your good energy is designed to be contagious. And the results are exponential.

# The results

Your acts may be small, but your influence is great. You may see it as only a drop in the bucket, but consider the drop and the bucket. Good acts in your home and your life contribute to goodness in a much larger world. Start with your home.

BGE offers lots of programs that can result in good acts. Getting a Quick Home Energy Check-up or an HVAC Tune-up—both of which are available at no additional cost—can help you save money. Great things often start with small acts. These small acts join other small acts to form a tidal wave of positive change. That wave will leave stronger, more sustainable communities in its wake.

 bge<sup>™</sup> AN EXELON COMPANY

# The most important member of your family can't go without hot water

Choose an energy-efficient heat pump water heater and receive up to a \$1,600 rebate. And thanks to the Inflation Reduction Act, you can get a tax credit to cover 30% of the project cost up to \$2,000. Plus, you'll continue to save over the life of the appliance, which is up to \$550 per year in energy costs.\* Talk about cleaning up.



#### Learn more at BGESmartEnergy.com/WaterHeater3 or scan the QR code.

\*Savings based on a household of four compared to a standard electric water heater. Source: energystar.gov. Please contact a tax professional or certified public accountant to confirm details specific to your gualifications and eligibility.



EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money. To learn more about EmPOWER and how you can participate, go to BGESmartEnergy.com.

WHO DID IT BEST?

# TALES OF A HOME ENERGY EXPERT

# **MEET TYRELL ARMSTRONG**

When you're in the room with Tyrell, you immediately feel his natural, almost effortless sense of calm. He has the focus and quiet confidence of a man who knows his purpose. And that's because he does. Tyrell found both his place in this world and his calling, that rare intersection of making a living and doing something you find truly rewarding. And what does Tyrell do for a living? As a <u>Quick Home Energy Check-up</u> professional, he helps people save money.

When you book an appointment, a specialist like Tyrell performs a roughly one-hour walk-through of your home pointing out ways you can be more energy efficient. Insulation levels and air leakage are inspected. Upgrades like LED light bulbs and smart power strips are installed with your permission. Best of all—and this is Tyrell's favorite part—as a BGE customer, you enjoy this service at no additional cost.

We sat down with Tyrell and found out what makes him tick—and what you can learn from his experience evaluating hundreds of homes across central Maryland. We're guessing what you'll learn will go well beyond energy efficiency.

# How did you start helping people with their energy efficiency?

I used to work at a nonprofit called <u>Civic Works</u>, supporting a program called "Project Light Bulb." We would go door to door, informing people of energy-saving tips and products and letting them know about different BGE programs.

#### How'd that make you feel?

It was actually pretty cool because a lot of people in the inner city have no idea that BGE even had these types of programs. All they knew about BGE was their bill.

#### And if you've volunteered before you "went pro," you must feel pretty passionate about helping people.

Yes, I really do. I went to Civic Works for some training and I kind of found my passion. Everyone has that niche in life, and you don't know it until you come across it. This was mine. The guy who trained me said we both grew up in the same neighborhoods. When he trained me up, he opened a new door and avenue in my life. And I've been working on it ever since.

# That's so cool that you grew up in the same area—such a small world.

Yeah, it's funny that way. Baltimore is just one of those cities where we have a bunch of mutual friends but never actually met one another until the program. Each dot represents a visit from a single home energy expert.

# Your job allows you to be involved in this community.

I grew up in East Baltimore. Born and raised here. Helping is in my DNA. I can't explain the joy I get out of it. Everybody has their passion. I always had a passion for building, but once I got into the whole house-building science, that's when it really got interesting.

#### WHO DID IT BEST?

# Do you feel that sense of community when you visit these homes?

Yes. Some houses I do. Some I don't, you know? When you come into a customer's home, they automatically think you're trying to sell them something. So, you have to let them get to know you and what you're bringing them—that you're actually there to help. Once you get past that barrier, that's when people seem to open up.

#### Take us through a typical visit.

Once I get to a home, I explain why I'm there. I'll ask the customer what made them sign up for an appointment. Most of the time, they received a high bill for that month and want to know why. They automatically want to blame the meters. We walk through with the customers to check on the efficiency of their equipment, their habits and their actual usage. Once we walk through all of those, a lot of times, we have come up with solutions that had nothing to do with the meter.

#### There has to be a story there.

Yeah, a prime example: I had a couple who had a one-floor condominium, and they had a \$900 energy bill for the month. They just couldn't believe that. They said it was something going on with the meter. I was asking about their habits. Come to find out, the gentleman doesn't like the heat. Well, his wife likes the heat. So, his wife had the electric baseboard heat running, and he had the A/C running. They were running both at the same time.

# Wow, that's taking the thermostat wars to an extreme.

Exactly. Yeah, they were battling each other. Then, of course, she kind of lit into him while I was



Schedule your own Quick Home Energy Check-up at <u>BGESmartEnergy.com/Quick3</u>.

there. So yeah, I gave them a solution and got out of there. I'm sure he was probably in trouble once I left.

#### Do you see that a lot?

Yeah, a lot of times the high energy costs can be related to appliances, bad habits with lighting or the kids snuck in a space heater that the parents didn't have any idea about—things like that.

And then some homes are just not energy efficient. For example, a couple installed a high-end heating and cooling system in an inefficient home, without insulation.

So that's when we can check the draft in the home, recommend installing insulation and tell them about the utility rebates that go along with it. That will help them in the long run.

# So, you see people spending money solving the wrong problem?

We had a customer once who spent almost \$14,000 to get insulation blown into his home. No air sealing was done, and no ventilation measures were taken care of, so he wasn't getting the expected results. He wasn't too happy of a camper. He wanted me to perform a comprehensive home energy audit, which showed what he needed to do. It's hard to tell people that kind of hard truth. Because you feel sorry for them. But you come up with a solution, and you let them know. And leave the cards in their hands.

# How do you handle breaking that kind of news?

I don't like it, but I like for people to know the truth. Truth always prevails, so you just give them the hard truth. Sometimes, you have companies that do a horrible job. This example had roof leaks on top of it. There was no air sealing. Then I explained to him that the insulation wasn't doing anything but just being an air filter right now for his conditioned air leaving the house.

#### Very often, you see them do one thing. Too often, that's not enough.

Yeah, it is a whole-house approach, most definitely. You need to know the total building science when you go into making improvements, so you can make their home safe and efficient.

# Do you bond with the people you're helping?

Many people still contact me years later. Some people just appreciate that. For example, we installed solar panels in one woman's home after her Check-up. She was already a very low-use person. So, she got her panels, and every month, she emailed me about her bill, which was negative. She was so excited to share how little electricity she was using.

# Would you do anything else when it comes to a career?

No, I found my spot. I found my niche, and this is it. You can tell. Can't you see the joy on my face?

## **DIGITAL BONUS:**

In his 11 years in the business, Shane Miles has seen a thing or twenty while conducting home energy audits. From hidden gas leaks to unnecessary and expensive window replacements, Shane's home detective work has shed light on problem areas and given grateful homeowners peace of mind in knowing how to solve them. Read his story on our website at BGESmartEnergy.com/Magazine.

Home Solutions

39

THE EFFICIENT HOME

YOU'VE GOT THIS

# **LEAVE YOUR** (THERMOSTAT) WORRIES BEHIND

It's your home. It should be a place where you can focus on family and friends, not thermostats. Luckily, our technology is getting smarter—and the new smart thermostats are downright geniuses. Fortunately for us humans, it doesn't take a brainiac to benefit from a smart thermostat to increase your home's comfort and reduce energy use.

# 19.6 million users can't be wrong

you and your family.

| ې<br>تې | *                      | Ξ |
|---------|------------------------|---|
|         | 0 40% │ <i>摰</i> Clean |   |
|         | 70                     |   |
|         | 12                     |   |
|         | 72                     |   |
|         |                        |   |

According to S&P Global Market Intelligence, 19.6 million smart thermostats were installed in the U.S. by the end of 2023something that helped the nation use 1.4% less energy on heating and cooling than it otherwise would have. That may not sound like much, but considering that almost half of all the energy you use at home goes to heating and cooling, it really adds up.

This trend will only accelerate. The number of installed smart thermostats is expected to reach 38.3 million in 2026, saving up to 15.5 terawatt hours of electricity-equivalent to the CO<sub>2</sub> emissions from powering 1,412,095 homes for a year. That's a lot of savings for

## Turn up the convenience and the benefits

Cutting your home's energy use and saving money is easy with a smart thermostat. These Wi-Fi-enabled devices learn your family's heating and cooling preferences and can automatically adjust your home's temperature based on that learning.

You may be thinking, "That sounds great, but what does that really mean for me?" Glad you asked. Let's say you're someone who likes to keep the temperature cooler at night for sleeping but someone else in your home prefers it nice and warm when you get out of bed in the morning. Your smart thermostat can do that for you. And if you normally turn the heat down before you head out for work, your thermostat will learn that, too. You get comfort and savings, without having to lift a finger. Pretty neat.

Smart thermostats also let you control your home's temperature on the go using a mobile device.

Imagine your family from Florida is arriving at your home for a visit while you're still at to have to with learn does

the office. Your thermostat is normally at an energy-saving setting while no one's home. Do you want to spend the evening listening to a debate about your home's comfort? Forget about it. With a smart thermostat, you can quickly and easily tweak the temperature from your mobile device. Crisis averted.

Or say you're halfway to Ocean City for a summer getaway when someone in your family reminds you that you forgot to turn the thermostat up a few degrees to save some money. In a flash, you can raise the temperature and get back to planning your crab feast.

A word to the wise. There's a big difference between a smart thermostat and a programmable thermostat. While the two can do many of the same things, you have to manually enter all the settings in a programmable thermostat yourself. In other words, you or someone in your family will have to program it. Not so with a smart thermostat. It learns your preferences and does the work for you.

## Save. Then, after you save, save some more.

Ready to purchase a smart thermostat of your own? Check out the <u>BCE Marketplace</u>, where you can get rebates of up to \$100 on a variety of smart thermostats. And you'll keep saving for years to come thanks to reduced energy use.

## Not a DIYer? No problem.

While the handiest member of your family may be able to install your smart thermostat on their own, it's even easier to have a pro do it for you. And, bonus: You won't have to debate who the handiest member of your family is. Take a look at BGE's Quick Home Energy Check-up and HVAC Tune-up programs to see how you could get a smart thermostat installed at no additional cost to you-while discovering even more ways to save on energy costs.

O bge<sup>™</sup> AN EXELON COMPANY

# Comfort is **personal**



Every home is different. That's why we offer rebates on a range of smart thermostats, so you can find the one that's right for you.

**Rebates up to \$100** on select ENERGY STAR<sup>®</sup> certified models.



Shop for yours now at BGESmartEnergy.com/Smart3 or scan the QR code.

EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money. To learn more about EmPOWER and how you can participate, go to **BGESmartEnergy.com**.

42 / ISSUE 3 2024



#### COMIC CONSERVATION

# **CAPTION THIS!**





Please use the provided QR code or email <u>residential@</u> <u>BGESmartEnergy.com</u> to submit your caption for the cartoon above. The best one will appear in our next edition.



issue two winning caption "Showoff!"

-LAURA B

BGE assumes no liability for the use of the information contained in this document. This document does not constitute a standard, specification or regulation. BGE does not endorse products or manufacturers. Trademarks or manufacturers' names appear in this document only because they are considered essential to the objective of the document; they are included for informational purposes only and are not intended to reflect a preference, approval or endorsement of any one product or entity. Product and service offerings, as well as rebate and discount amounts, are accurate as of the date of publication and are subject to change or cancellation. Please visit our website, **BGESmartEnergy.com**, for the most up-to-date information.

We pick up your old, working fridge. **You pick up \$50.** 

BGE is offering to recycle your old fridge. Get \$50 for an old, working fridge or freezer. So you're getting paid to recycle while reducing your energy use. Now that's a win-win.



🕽 bge<sup>∞</sup>

AN EXELON COMPANY

Schedule your pickup today at BGESmartEnergy.com/ByeFridge3 or scan the QR code.

EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money. To learn more about EmPOWER and how you can participate, go to BGESmartEnergy.com.







#### EmP WER MARYLAND

# Freeze, heat, wash, dry and **save**

All appliances do their assigned appliance-y duties. Not all appliances save money. So, look for the ENERGY STAR<sup>®</sup> label. These devices are designed and built to save you money over the life of the product. You can also pick up **hundreds in rebates** at participating retailers and when you visit us online.

Visit **BGESmartEnergy.com/Appliances3** or **scan the QR code** to learn more.





EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money. To learn more about EmPOWER and how you can participate, go to **BGESmartEnergy.com**.



H.