## MORE WAYS TO HELP THE ENVIRONMENT

While saving energy at home is an important first step, you can do even more to reduce New York's carbon footprint by **being more** energy efficient when you are on the road.

Here are a few ideas to help stretch your gasoline dollar.

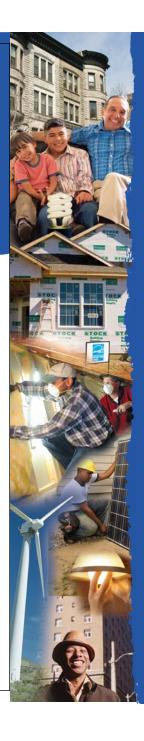


- Properly inflate your tires.
- Change your air filter.
- Observe the speed limit.
- Keep your engine properly tuned.
- Combine trips.
- Purchase/lease a more fuel efficient vehicle.

For more information about saving energy, call us toll-free or visit our Web site.

www.GetEnergySmart.org | 1-877-NY-SMART





# NYSERDA'S GUIDE TO SAVING MONEY & ENERGY



## Join the New York energy revolution and Start saving money and energy Now.

#### While you're at it, you'll be doing your part for the environment.

The question is, how can I start? You'll find the answers at the New York State Energy Research and Development Authority (NYSERDA) – the one-stop resource helping New Yorkers save energy.

**At NYSERDA, we will show you practical ways to save energy** and provide the technical and financial help you need to make your home more energy efficient. It is all part of our commitment to help New Yorkers make a difference.

To get you started, this booklet covers a range of energy efficiency programs and services from NYSERDA. Whether you are building a new home, buying a computer, or simply replacing a light bulb, we can help.

Log on to **www.GetEnergySmart.org** or call **1-877-NY-SMART** for more information, because we all want to save energy.

Home Performance with ENERGY STAR® (SOLUTIONS FOR EXISTING HOMES)



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New York ENERGY STAR® Homes (SOLUTIONS FOR BUILDING A NEW HOME)



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**ENERGY STAR® Qualified Lighting** 



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**ENERGY STAR® Qualified Appliances** 



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**ENERGY STAR® Qualified Home Electronics** 



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**Advanced Technologies Solutions** 

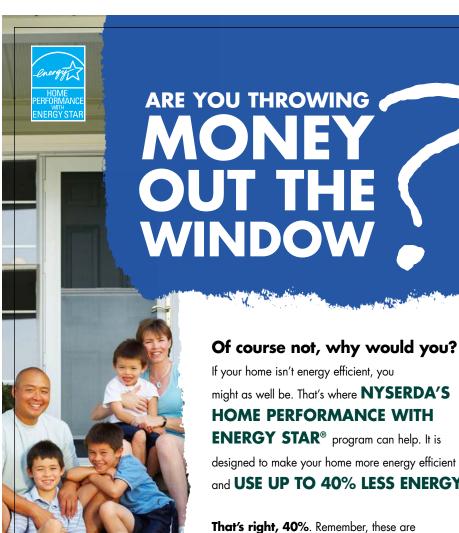


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**Income-Eligible Energy Solutions** 



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might as well be. That's where NYSERDA'S designed to make your home more energy efficient and USE UP TO 40% LESS ENERGY.

savings you'll see now and into the future. Not to mention, an energy-efficient home is more comfortable, and safer too.

www.GetEnergySmart.org

#### Ready to start saving?

OK, but before you spring into action, think about this; installing new heating or air conditioning, replacing a refrigerator or windows, or even adding insulation might fix only part of the problem.



What you need is a "whole-house" approach. That's the idea behind the Home Performance with ENERGY STAR program. A Comprehensive Home Assessment is performed by a participating Building Performance Institute (BPI) Accredited Contractor. They are recognized leaders in home performance testing and will assess and test your home's energy performance from top to bottom.





#### THE EXPERT HAS ARRIVED.

Like a doctor conducting a physical, a participating BPI Accredited Contractor is an expert on existing homes. They look at how everything in your house interacts, rather than looking at one thing — such as drafty, single-pane windows, or that clunker of a heating system.

By taking a whole-house approach, your participating BPI Accredited Contractor can help you tackle a host of problems, including:

- High energy use
- Drafty rooms
- Inefficient, old appliances
- Inconsistent temperatures throughout your home
- Inadequate ventilation and poor humidity control

#### So, what's involved?

Your BPI Accredited Contractor will test your home with diagnostic equipment to spot any problems. They'll conduct health and safety checks, and—this is the unique part—a blower door test, which shows you how much and where air is leaking out of your home.



At the end, you'll receive a report detailing where improvements can be made.

### SOME CUSTOMIZED RECOMMENDATIONS MAY INCLUDE:

- Upgrading lighting and appliances
- Sealing air leaks and adding insulation
- Sealing ductwork
- Improving heating and cooling systems
- Installing fresh air ventilation systems



Remember, always choose a participating BPI Accredited Contractor. They provide a thorough evaluation of how your home uses energy with a Comprehensive Home Assessment.

#### Ready to make your home more energy efficient?

If you choose, your participating BPI Accredited Contractor can make the improvements too. They'll even show you how to apply for low-interest loans or Homeowner Finance Incentive from NYSERDA on approved improvements. And remember, only participating BPI Accredited Contractors can test your home and make the improvements you need to qualify for NYSERDA financing and incentives.







#### Can your house pass the test?

**Find out.** Schedule a Comprehensive Home Assessment with a participating BPI Accredited Contractor.

Visit www.GetEnergySmart.org

to find a participating BPI Accredited Contractor in your area, or call **1-877-NY-SMART.** 



SUPER COMFORTABLE

at the same time. Sound like a dream?

It's not

**NEW YORK** 





#### It's the New York ENERGY STAR Homes program.

New York ENERGY STAR Homes are built to save energy; in fact, they use approximately 30% less energy than conventionally built homes. But all new homes are energy efficient, aren't they? Not really. A lot of builders will tell you they build energy-efficient homes, but only builders of New York ENERGY STAR Homes can prove it.

**So prove it.** New York ENERGY STAR Homes must pass a tough evaluation, including a computer-based analysis, physical inspections, and third-party certification testing. How does a house pass the test? It's all about incorporating energy efficiency measures throughout the home, such as:

- Better insulation and air sealing
- High-efficiency appliances, lighting, and windows
- Mechanical ventilation
- Performance-tested heating and cooling systems

www.GetEnergySmart.org



#### NOT ALL HOMES ARE CREATED EQUAL.

You probably think every new home has enough insulation to keep it warm in the winter and cool in the summer. It takes more than that. You need high-performance insulation, good air sealing, and proper installation for optimum results. With a New York ENERGY STAR Home, you'll get the most out of your insulation so your home is more comfortable and uses less energy. It's just one of the ways New York **ENERGY STAR Homes make** a difference.

#### Do I need to be an energy expert?

No. Your New York ENERGY STAR Homes builder is the expert. They work with all the latest technology, so they can help you make the right decisions for your home, no matter what your budget or style of new home.

#### Good, Better, Best.

We'll show you what the options are and the savings you can expect. For example, you could choose an exhaust-only ventilation system (good), simple balanced ventilation (better), or—drum roll please—heat recovery system (best). Why is heat recovery so great? Because it goes one step further by recapturing heat that would be lost.

#### The choice is yours.

If you're building a new home, then the smart choice is a New York ENERGY STAR Home. Already, thousands of New York homeowners are experiencing the difference:



- A home that uses less energy lower energy use every month and every year
- A home that's better for the environment—reducing energy consumption and harmful emissions is good for the environment and good for us all



- A home that's more comfortable —warmer in winter, cooler in summer, quieter, and with fewer drafts
- A home that's healthier for you and your family—proper ventilation means better air quality



#### Make your dream home a dream.

Make your new home a New York ENERGY STAR Home. You'll save money, energy, and do your bit for the environment.

Visit www.GetEnergySmart.org to find a listing of builders in your area, or call NYSERDA at 1-877-NY-SMART for more information.

#### **MEET THE** BRIGHTEST BULB

#### **ENERGY STAR®** qualified compact fluorescent light bulbs

(CFLs) leave traditional incandescent bulbs in the dark. CFLs use less energy, last longer, and are better for the environment. Think of it this way: if every home replaced just one bulb with an ENERGY STAR qualified CFL, we'd save enough energy to light three million homes for a year, and more than \$600 million in annual energy bills.

(Source: US Environmental Protection Agency)

#### NOW THAT'S A BRIGHT BULB.

#### Why stop with just one?

**ENERGY STAR** qualified CFLs use approximately 75% less energy than incandescent bulbs and last 7-10 times longer. Each ENERGY STAR qualified CFL you install will save you up to \$70 over its lifetime. And, you can put the stepladder away because CFLs last 6,000 hours or more, so you'll change a lot fewer bulbs.



**ENERGY STAR qualified** CFLs are ideal for the lights you use most every day, such as the lights in your:

Family and living rooms Kitchen Dining room **Bedrooms** Outdoors

IN THE PACK.

#### Choose the bulb for the right location.

**ENERGY STAR** qualified CFLs produce different types of light based on their Correlated Color Temperature (CCT). They also come in a variety of sizes, colors, and functions including dimmina. three-way functionality, and outdoor use.

Because CFLs use less energy, they also use less wattage to produce the same amount of light. Check the package for information on comparable wattage and choose the appropriate CFL for each location in your home. Also visit www.GetEnergySmart.org to find the right bulb for your application.

#### What about hum and flicker?

ENERGY STAR aualified CFLs don't have the hum and flicker that some fluorescent lights produce. This problem is eliminated with the use of an electronic ballast within the metallic screw base.

#### Now it's easy to recycle them.

CFLs contain a very small amount of mercury, so it's smart to recycle burned-out bulbs. You'll find a full list of recycling locations throughout New York State at www.GetEnergySmart.org.

#### How about the selection of ENERGY STAR qualified light fixtures?

From floor lamps to candelabras to bathroom vanity fixtures—there are hundreds of styles available. Plus, light fixtures that have earned the ENERGY STAR rating use one quarter of the energy of traditional lighting. That makes it a win-win situation. What's not to love?





#### Make the switch.

Switch from incandescent bulbs to ENERGY STAR qualified compact fluorescent light bulbs, and choose ENERGY STAR qualified light fixtures. You'll save money, energy, and make a difference for the environment. They're easy to find just look for the ENERGY STAR symbol. Visit www.GetEnergySmart.org or call 1-877-NY-SMART to find out more.

#### THE PRICE TAG ONLY TELLS HALF THE STORY.



You're buying a new appliance. Make sure you look at more than just the **price.** Every appliance has two costs: what you see on the price tag and how much it costs to run. When you look at both costs, you'll see that

**ENERGY STAR® QUALIFIED APPLIANCES** ARE THE CLEAR WINNERS.





#### What makes **ENERGY STAR** qualified appliances so special?

**ENERGY STAR** qualified appliances incorporate advanced technologies

and use 10 to 50% less energy and water than standard models, saving you money from the first day you own them.

Does it make a difference? Absolutely. By purchasing ENERGY STAR qualified appliances, you will save money and promote a cleaner environment without sacrificing the product quality and performance you expect.

Visit www.GetEnergySmart.org for tips on lowering your energy costs.



#### Sounds too good to be true.

Well, try this one on for size. ENERGY STAR qualified clothes washers use half the amount of water compared to standard models, saving between 8,000 and 11,000 gallons per year. Clothes also dry faster because more water is extracted during the spin cycle. And surprise, surprise, ENERGY STAR qualified washers don't have an agitator, so they're gentler on your clothes.



#### Put your fridge on an energy diet.

ENERGY STAR qualified refrigerators use up to 20% less energy than standard models. ENERGY STAR qualified refrigerators and freezers are designed with great energy-saving features, like extra insulation, more efficient compressors, and super-accurate temperature and defrost controls.

ENERGY STAR qualified refrigerators and freezers also look great and come in a wide range of colors and styles.

#### HERE ARE SOME OTHER GREAT WAYS TO SAVE MONEY AND ENERGY.

#### Clothes washers Always run full loads of laundry and use the cold water setting when you can.

#### Refrigerators and freezers

Position them away from heat sources, walls, and cabinets to maximize energy efficiency.

#### Air conditioners

For the greatest savings, choose the unit with the highest Energy Efficiency Ratio (EER).

#### Dishwashers

Run full loads in the early morning or late at night to relieve the power load during the day.



#### I guess you're going to tell me I can save energy with my dishwasher too?

That's right, and your room air conditioner and dehumidifier too. You'll find ENERGY STAR qualified models for many of the appliances you use in your home today. So don't forget, every time you choose ENERGY STAR, you're saving energy and money.



#### Just look for the star.

Next time you're shopping for an appliance, look for the ENERGY STAR logo. It's your guarantee that your appliance will save you energy and money. To find an ENERGY STAR qualified appliance retailer near you, visit www.GetEnergySmart.org or call us at 1-877-NY-SMART.

### HOME ELECTRONICS: EVEN WHEN THEY'RE ON. THEY'RE OFF



If you think home electronics like televisions, DVD players, and computers use energy only when they're turned on, then you're in for a surprise. Home electronics use energy

#### **EVEN AFTER YOU TURN THEM OFF.**

So it's no wonder that home electronics are responsible for over a quarter of our total home electricity use.



#### Home electronics use that much energy?

Absolutely. Luckily, ENERGY STAR® qualified home electronics use a lot less energy. In fact, they use around 60% less energy in the off position

compared to standard models. And, you'll save more energy by plugging electronics into a power strip that can be turned off when products are not being used.

#### But I want state-of-the-art. I want bells and whistles.

And that's exactly what you'll get with ENERGY STAR qualified home electronics. Take televisions, for example. Choose from all the latest makes and models, including plasma, flat screen, digital, even home theater with surround sound. You'll find ENERGY STAR qualified home electronics from all the major brands. The only difference is you save energy. How cool is that?

Is my home office wasting energy too? Hate to be the bearer of bad news, but yes. Copiers and fax machines are big culprits because you leave them on for long periods of time. But an ENERGY STAR qualified copier powers down when not in use, uses about 50% of the energy, and prints double-sided pages so you spend less time and money on copying and paper costs. Save even more with all-in-one printer, scanner, and fax machines. These use 30-75% less energy than standard equipment. And about that computer of yours...

**But I've got a screen saver.** I'm sure it's very nice, but it doesn't save energy. It's better to shut off the monitor when you're not using your computer. Remember, when you leave your computer on 24/7, you're paying more for electricity, and power surges can occur. Plus, all that dust gets sucked into your computer.

#### Any more energy-saving ideas?

- Check out your owner's manual so you can take advantage of all of your computer's energy-saving features, like sleep mode and standby power.
- Make sure all your power management features are enabled.
- Use ink-jet printers instead of laser.
   They use up to 90% less energy.
- Think before you print. Don't print documents or e-mails unless you need to. It wastes paper and energy.

#### I'm on a roll. How can I save more energy?

**Good:** Unplug electronics when you're not using them (unless the memory function is needed).

**Better:** Plug home electronics into a power strip so you can shut them off with the flick of a switch. Even better, use a plug-in timer to automatically

shut down the power strip for extended periods of time, such as overnight when you're asleep.

**Best:** Use an advanced power strip that has built-in controls. It allows you to divide items that need constant power from those that don't.

#### Make it ENERGY STAR qualified home electronics.

Visit **www.GetEnergySmart.org** or call us at **1-877-NY-SMART.** You'll find a list of retailers who offer ENERGY STAR qualified home electronics. Plus, you'll find more energy-savings tips.

#### WOULDN'T IT BE NICE TO BE ABLE TO PRODUCE YOUR **OWN ENERGY**

#### Well, now you can.

It's called renewable energy, and it harnesses the power of the sun, wind, or earth to create clean energy for your home. Renewable energy used to be a dream for most homeowners. But thanks to new technologies and lower installation prices,

#### RENEWABLE ENERGY IS A PRACTICAL AND REAL **SOLUTION FOR MANY NEW YORKERS.**

For more information on available incentives and low-interest financing, go to

www.GetEnergySmart.org/AdvancedTech/Overview.aspx



#### Sold. How do I get started?

First things first. Renewable energy works best, and provides you with the most savings, when it's part of a complete energy overhaul of your home. So, first schedule a Home Performance with ENERGY STAR® Comprehensive Home Assessment. A participating BPI Accredited Contractor will test your house from top to bottom and recommend appropriate energy-saving measures. Remember, making these energy efficiency improvements can reduce your home's energy use by up to 40%. Now, because your home is more energy efficient, a smaller, less expensive renewable system can be used.

#### Got it. Now, am I ready for renewables?

You bet. There are three types of renewable energy to choose from:







• Solar or photovoltaic

Wind

Geothermal

#### WOULD GEOTHERMAL BE RIGHT FOR YOU?

With geothermal, a series of underground pipes called a loop is installed on your property. The pipes are connected to your home. In the winter, these pipes draw the earth's natural warmth and use it to heat your home. In the summer, the reverse happens and heat is removed from your home and replaced by cooler air. Geothermal can also be used to make hot water

Geothermal systems require very little energy to run, they're compact, and require minimal maintenance. Because the loop must be buried in the ground or placed in a well, geothermal is often the choice for new home builders. Systems can be installed for existing homes as well, but should be installed in energy-efficient homes.



#### Let the sun shine!

Photovoltaic (PV) systems convert sunlight into electricity. The PV system is connected to your home electricity service panel and supplements your existing power. And get this; if your system generates more power than you're using, your meter spins backward and you can receive a credit from your utility company.

Typical PV systems are mounted onto your roof and can be as small as 50 square feet or as large as 1,000 square feet. The Clean Power Estimator at www.PowerNaturally.org can give you an idea if PV makes sense for your home. If you're interested, contact several PV installers to get competitive quotes on installation costs and projected energy production.

#### Now let's talk about wind.

Like solar, wind power is a clean and renewable energy source. Traditionally used on a larger industrial scale, wind power is now a viable option for some homes. Before you get started though, make sure your site is right.





Wind speed. You'll need an annual average wind speed of at least 10 mph. Check out the wind maps at www.awstruewind.com.

**Space.** You need at least an acre of land with a location set back from trees, buildings, and property lines.

**Permits.** Find out what permits and approvals you'll need in your area.

**Neighbors.** People are often concerned about noise and visual impact. Speak to them first and let them know that wind turbines aren't any noisier than a typical home fridge.

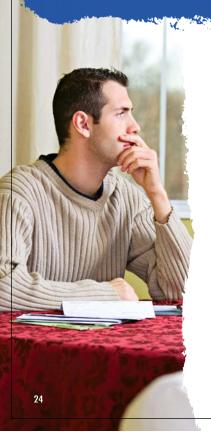
There are other considerations, but your installer can help you.
To find an eligible installer near you, visit
www.PowerNaturally.org.

#### I'm feeling green and clean.

Then you're ready to go. Stop off at www.PowerNaturally.org to find out more about renewable energy and to find an installer in your area. Or call us at 1-877-NY-SMART.

## ARE YOU FEELING ATTHE PINCH

AND HAVE A LIMITED INCOME



#### You're not alone.

Rising energy prices are affecting us all. But, there is something you can do about it. NYSERDA has many ways to help income-eligible New Yorkers make their homes and apartments more energy efficient with programs such as

ASSISTED HOME
PERFORMANCE WITH
ENERGY STAR® and
EMPOWER NEW YORKSM.

#### Save money? Prove it.

NYSERDA's Assisted Home Performance with
ENERGY STAR program helps low- and moderateincome households reduce the amount of energy
they use by making energy efficiency improvements. The program
covers up to 50% or more of the costs of the approved energy
efficiency improvements, up to \$5,000 per household or \$10,000
for a 2-4 family building.



#### So, how does it work?

With Assisted Home Performance with ENERGY STAR, a participating BPI Accredited Contractor:

- Performs a Comprehensive Home Assessment
- Makes recommendations for energy improvements
- Provides a cost estimate to do the improvements
- Can even do the work

#### And how much can I save?

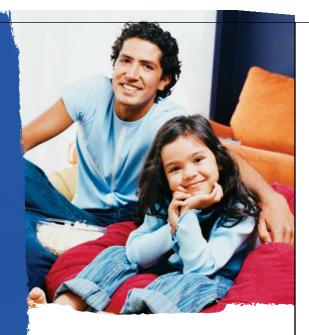
We're talking about saving up to 40% on your energy bills. And you may be eligible for additional incentives or low-interest financing to make saving energy even more affordable.

Visit www.GetEnergySmart.org for all the details.



#### ANSWER YES TO THE FOLLOWING QUESTIONS, AND YOU CAN APPLY FOR EMPOWER NEW YORKSM:

- Are you a customer of Central Hudson, Con Edison, NYSEG, National Grid, Orange and Rockland, or Rochester Gas and Flectric?
- Do you live in a building with 100 units or less?
- Do you participate in a utility payment assistance program or have a household income below 60% of the state median income (i.e., HEAP eligible)?



#### Whether you rent or own your own home, EmPower New York<sup>™</sup> may be for you.

It helps reduce the amount of energy you use with energy efficiency upgrades like lighting, refrigerator replacements, and new insulation.

There is even on-site energy education so you can learn how to manage your energy costs more efficiently.

#### Here's the really good news.

**EMPOWER NEW YORK**<sup>SM</sup> **IS FREE.** That's right! There is no cost to you. If you're renting, some measures may require a 25% landlord contribution, but remember, you don't pay anything.



#### What happens next?

Once you're approved for EmPower, an energy audit of your home will be scheduled by a BPI Accredited Contractor who will recommend many ways you can save energy.

The contractor will also make sure your appliances and heating and cooling systems are meeting health and safety standards.

#### Typical improvements include:

- Installing energy-efficient lighting and appliances
- Improving insulation
- Reducing drafts

#### The next move is yours.

If you're interested in Assisted Home Performance with ENERGY STAR or EmPower New York<sup>SM</sup>, call **1-877-NY-SMART**.

And don't forget, you can always find more information about these programs and other great ways to save energy at

www.GetEnergySmart.org