# Renewable Energy And Other Money Saving Secrets For Your Home



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## Introduction

In today's economy, there are more reasons than ever to cut your energy bill. One of the most popular ways to do so is to invest in renewable energy to power all or part of your home. But, even if you don't have the resources to install a full photovoltaic solar kit on your roof, there are dozens of other ways to cut your bills, save money, and generally be more kind to Mother Earth.

That's what we're going to talk about – the strategies that frugal homeowners and ecoconscious members of society are using to hack at their energy use once and for all. That includes cutting down on your power bill in as many ways as possible; installing green energy sources such as solar panels, solar heat and windmills; or simply cutting back on your food bill and other expenses.

The nation has had a wakeup call when it comes to our financial future. We cannot sustain endless spending and debt. If you've joined the ever-growing revolution and want to cut your bills, keep reading – it's time to rethink what you use and how you use it. This isn't just about your checkbook – it's about the future of our planet and everyone on it. I can't think of a better reason to start making changes.

Wait! Before you read any further, watch the following video that shows you how you can save massive amounts of money off your weekly food bill by growing your own vegetables. You'll also escape the danger of harmful toxins and pesticides as well!

# Save money by growing your own organic veggie garden:

## **Aquaponics**

Saving money on your food bill is just as important as cutting your power bills with renewable energy. In fact, you'll probably save more by growing that veggie garden than you ever would by installing solar panels! And this one is so easy, it maintains itself on autopilot.

# The World's Energy Crisis

Right now, we're coming to terms with a hard truth that has been hanging over our heads for decades. The amount of energy in the world is finite. We have always known that – it's fairly easy to understand when you consider that most of our energy is derived from fossil fuels. But, now more than ever we're seeing the evidence that we only have so long until energy sources grow too rare and too expensive for average consumers like us to afford.

It's a big problem because most consumers don't realize their role in the crisis. When we see a wide-scale problem, we assume that the government is responsible for fixing it. But, in reality, the government is limited in its actions as long as human beings continue to devour energy in such high amounts. We need to learn how to cut back our energy use as we replace the fossil fuels with sustainable solutions.

If you're not sure this is a problem you need to face, just look at the cost of oil, gas and electricity compared to 10–15 years ago. Gasoline in the early 2000s was barely more than \$1 per gallon in the United States. Today, it remains around \$3 consistently and sometimes goes upwards of \$4 per gallon. Heating oil and natural gas also continue to skyrocket in price to the point that some families must choose between food and heat in the winter. No one should be forced to make that kind of decision.

### **How Long Do We Have?**

Right now, we're on the cusp of a major turning point. It's believed that peak production will occur in the next 3–10 years. That means, after that point, production of fuel will not be able to increase with consumption any longer. With massive countries like China and India industrializing and growing at unheard of rates, this is a very bad thing for anyone who uses fossil fuels each day – as we all do, directly or indirectly.

Scientists are not sure when fossil fuels will start to run out – having a clear idea of the earth's contents is nearly impossible with current technology. But, conservative estimates put us at about halfway through the world's oil reserves. That means we could conceivably run out of oil within 30–40 years at the current consumption rates. That's the current rates. Year over year, oil consumption has rarely if ever gone down globally. So, we can expect it to increase, which means we could run out of oil even faster. Your children will almost surely live in a world where oil reserves dry up or deplete to a level where they can no longer afford it.

#### The Solutions

Right now, there are a lot of conversations going on around the world about what we should be doing to resolve the energy crisis. Compounding it is the fact that our continued use of fossil fuels is creating a growing climate change problem. So, what does our government plan to do to provide energy and fuel for families and individuals in the coming years as costs rise and supplies decrease?

Right now, actions by the government aren't going to make major dents in our fossil fuel use for years or even decades to come. But, as a consumer, you can do your own part to cut back on consumption. Not only will you help to reduce how much energy is used around the globe, but you'll be preparing for further price increases, reducing your bills and making it possible to survive in a world where energy costs dwarf other basic necessities.

That means finding alternative energy sources and implementing them in your home. Solar energy can be used to heat water and your house, as well as power your devices with the right installation. Wind power is another viable solution in many situations – providing a massive secondary source of power. Ultimately, though, whether you have the resources to install renewable energy for your home or not, the easiest way to save money is to reduce your energy consumption across the board.

This report is going to help you do just that – providing a bevy of options that will outline where your energy is currently going and how you can cut back that use immediately. With a world depending on us, it's our responsibility to take action now, not when our kids are grown and the earth has already been sucked dry.

# 20 Ways to Cut Down Your Bills

Right now, your biggest concerns are the bills you have to pay, not the future of our earth's energy sources. So, understandably, you'd rather hear what we can do right now to change what you spend than what you should be doing with money you don't have to replace that energy use.

To start with, understand that cutting your bills is not as easy as waving a wand and waiting for meters to run backwards. It takes hard work and sacrifice to reduce the bills you currently have. And if you have a family, cutting down on expenses is going to be even harder. Children and spouses are not always amenable to giving up their refrigerator grazing habits or their superhot showers. So, put on your gauntlets and buckle down because we're about to do some serious slashing of your budget.

#### **Before You Get Started**

Before you invest any time into cutting back your bills, I want you to do something very important. Call a family meeting, sit down with your kids and spouse, and discuss what's about to happen. Many times, a backlash occurs because you don't consult everyone before making changes. Putting up signs, unplugging appliances and canceling services can be frustrating for a family. So, instead of thrusting major changes into everyone's lives without notice, sit down and ask them their opinions.

It may not change your decisions, but just by discussing it, you can lay out clearly why the changes are being made and how they will benefit everyone in the long term. Mention what the savings will be spent on, how you're helping the environment and why you feel it is a necessary step. If properly communicated, your family should understand why these changes are being made.

- 1. Replace Incandescent Bulbs Old fashioned, incandescent bulbs are a huge money waster, both in energy use and cost of replacement. Modern fluorescent bulbs can last up to 5 years and use a fraction of the energy. If you're aiming for even bigger savings, go with LED light bulbs, which can last 25 times longer than incandescent bulbs and use even less energy than fluorescents.
- 2. Unplug Your Devices Most people figure that when they hit the power button, their appliance or electronic stops sucking juice from the wall. Unfortunately, it doesn't always work like that. Electricity may not be flowing and getting consumed, but it is very much being used. So, don't just turn devices like your

- computer and TV off; unplug them when not in use.
- 3. Turn Off Lights This is a simple one that you've likely heard since you were old enough to know what light switch is. But don't just turn the lights off when not in the room.. Turn them off at all times unless you specifically need that light to do something.
- **4. Buy Energy Star Appliances** The U.S. Government has a program that rates and labels appliances that are considered high efficiency in terms of energy use. Look for the Energy Star label, and research the energy use statistics, which by law must be labeled on all major appliances.
- 5. Wash Clothes Smartly Washing machines and dryers make up a huge chunk of your monthly energy use. First off, cut down how often you do laundry. Only run the machines when you have a full load, and use cold water whenever possible. Additionally, check your exhaust vents, and have your washer serviced to make sure it is working properly.
- **6.** Change the Thermostat In the winter, drop your thermostat to a bearable temperature around 68°F (20°C) during the day , 60°F (16°C) at night. In the summer, raise it to 78°F (26°C). The small difference from the standard room temperature can save you hundreds of dollars a year, especially if you live in an extreme climate.
- 7. Turn Off Your Computer Computers leach tremendous amounts of electricity, even when in hibernation modes. If you're not using a computer, turn it off simple as that. Additionally, make sure it is attached to a power strip that you can turn off whenever the computer is off.
- 8. Check for Leaks and Improper Insulation Homes with poor insulation or leaks in air vents can bleed energy. Have an inspection done to check for thin walls, poorly sealed doors, leaking air vents, or other issues that can cause energy loss. In some cities, there are public programs for low-income families and the elderly to provide free insulation. If nothing else, home insulation is a big tax write-off.
- **9. Plant Trees Carefully** Trees around your home can provide much-needed shade in the summer and sun in the winter. Southern and western exposures are best, and you should plant deciduous trees so that the leaves are gone in the winter to let winter sun in. You can also install awnings each summer to reduce

direct sunlight into your home.

- **10. Prewash and Load the Dishwasher** Dishwashers suck energy to heat water. To cut back on that energy use, scrape and pre-rinse your dishes, and then use a lower cycle for your dishwasher.
- 11.Use Smaller Appliances for Small Meals If you're only making a small meal or feeding one or two people, avoid turning on your oven or stove. An Energy Star microwave or toaster oven will provide plenty of heat to warm up a bowl of soup or cook a cheese sandwich.
- **12. Hang Your Clothes to Dry** If possible, avoid using your dryer altogether. Hang clotheslines in your basement and backyard. As long as it is not below freezing outside, wet clothes will dry in nearly any temperature. The only issue can be with prolonged high humidity.
- **13.Seal Windows in the Winter** Leaky windows can lead to a tremendous amount of lost heat in the winter. Make sure you install storm windows, and that the seals around your windows are properly caulked to avoid leakage.
- **14.Use Shades in the Summer** Instead of letting all that sunlight into your house and fighting it back with an air conditioner, use shades that can let in the cool air but block the sunlight. Again, you should also consider installing awnings to block direct sunlight.
- **15.Use Power Strips to Control Use** Use power strips on every outlet that you can. They not only reduce direct energy use; they allow you to turn off the power being used without having to unplug every appliance individually. It's also a good idea to have power strips to avoid surges that can harm your devices.
- **16. Don't Idle Your Car Unnecessarily** Idling a car wastes gasoline. Most cars can be warmed up by driving them. Instead of sitting in your car and idling without moving, drive it to warm it up before you hit the highway. Additionally, avoid city streets whenever possible to improve gas mileage.
- 17. Tune Up Your Car Regularly Regular tune-ups and oil changes in your car will improve gas mileage and reduce the need for costly repairs. Even if you have a new car with no problems, make sure you stick to your regular maintenance schedule to reduce potentially massive bills.

- **18. Reduce Weight in the Car** Take out any unnecessary weight from your trunk or back seat. Extra weight reduces gas mileage and slows your car down, also putting a heavier burden on the engine, which can cost you later.
- **19. Have Your Home Inspected** Have someone take a look at your home to find any leaks, insulation problems, old wiring or other energy-wasting issues. Many times, energy-draining issues can be masked by walls, flooring or a simple lack of knowledge. Look for an impartial third party that won't try to sell you on unnecessary repairs.
- **20.Go Outside Instead of Watching TV** The more time you spend inside, the more electricity you use. So, instead of constantly watching TV, surfing the Internet and playing video games, go outside and enjoy a sport or read a book.

# Secrets to Installing Solar Power in Your Home

When it comes to renewable energy, nothing gets more press than solar power and for good reason. The sun is out there all day, every day. Even on cloudy days, the sun is showering us with energy that can be harnessed and used to heat our homes, power our appliances, and replace the expensive, fossil fuel-burning energy companies. Every square meter of sunlight carries 1,000 watts of energy – a massive burst of raw power.

But, is solar power really an efficient option, and if so, is it affordable? Let's take a closer look at what energy costs in your home can be replaced with solar and how effective they generally are.

#### **Solar Hot Water and Space Heating**

Solar hot water and space heating is one of the simplest ways to harness the power of the sun. It requires a solar collector, a tank on your roof, and the necessary connections to circulate heated water throughout your home. It's about 80% cheaper than installing solar panels and can pay for itself within 2–3 years instead of 20.

#### What You Need for Solar Heating

There are two different types of solar heating installations:

- Passive installation, which circulates water directly from the solar collector throughout your home without any pumps or motors
- Active installation, which pumps cold water into the collector and hot water into your hot water tank where it can be stored for later use.

The simplest to install and least expensive is a passive system because it requires fewer parts, less maintenance and no permits. However, you should still be careful when installing a passive solar hot water system, if only because you're working with active pipes in your home.

## **Types of Solar Collectors**

A solar collector is a panel attached to your roof that will absorb energy from the sun and convert it to heat. In the case of a passive system, the collector will directly heat the water in a tank attached to your roof. Basically, it's like a greenhouse for your home's hot water.

However, not every home can benefit from a simple, flat plate solar collector. In colder climates where that water might freeze, you will need a more indirect system. In this case, you will need an evacuated tube system. What evacuated tubes do is surround the water pipes with glass tubes that have inert air in them. This counteracts the ambient air temperature so only the sun's energy affects the overall temperature.

Additionally, those pipes will usually contain some kind of coolant rather than water. The heated coolant is then transferred to a separate water tank to heat potable water. The water never freezes, the pipes stay strong, and you have hot water even in the winter.

## Implementation

Putting in a solar hot water system starts with analysis of your hot water needs. How much do you use, and what do you currently pay for it? Likely, you will never be able to replace your entire hot water supply with solar hot water, but anything you do now will help your bills in the future.

Beyond the solar collector – which will be between 4 and 12 feet long – you'll need the following parts to complete a solar heating installation:

- Storage Tanks For active systems using evacuated tubes, storage tanks will
  hold the potable water away from the roof. This allows you to heat the water in a
  separate location more safely in cold temperatures.
- Water Heater If you choose to remain connected to the grid, with the option for outside energy to heat your water, this is important. Most people remain connected to be sure they never run out of hot water. If the solar tank drains when you have company or it gets too cold outside, this will be welcome.
- **Heat Exchanger** If you are using coolant in your solar collectors, you'll need pipes or coils to transfer the heat from the coolant to your water, usually inside your storage tanks.
- Water Pumps In an active system, you'll need water pumps to move water to and from your solar collectors. Passive systems don't use water pumps.
- Valves and Controls These are used in active systems as well. Controls will determine where water is pumped and when to turn on your hot water tank. You can also install an isolation valve to cut off your solar system if something goes wrong along with a tempering valve. If you're using direct hot water from your

solar collector, a tempering valve will make sure it doesn't get too hot when you're in the shower or washing dishes.

### **Hot Water or Heating**

Of the two, hot water is considered the simplest to install because it uses less energy than heating and because it only requires two connections to existing plumbing. However, for many homes – especially new ones – it is viable to use a solar heating system for both hot water and heating. In the case of heating, you'll need to install pipes and radiators throughout the house to transfer the heat to your rooms, which will require professional assistance.

#### Photovoltaic Solar Power

The second type of solar power – the one you've likely heard more about – is photovoltaic. Without getting too technical, photovoltaic solar power is the process of converting solar energy directly into electricity using a solar panel.

These panels are made with highly conductive materials like silicon, which can break apart the energy from the sun's rays into electrons and then direct them into an electric current. That current is transmitted through wiring in your home, converted into usable electricity, and funneled to your outlets and lighting fixtures.

It's not quite as simple as all that, but nor is it much more complicated. Solar power's biggest drawback isn't complexity, but cost.

Because solar panels are notoriously inefficient (the best panels convert between 10–15% of the solar energy that hits them), and because they take up so much space, a system that will fully power your home would be large and rather expensive.

#### **Installation Secrets**

Just because they're expensive, though, doesn't mean solar power isn't feasible. There are in fact many ways to optimize your use of solar panels without having to pay through the nose.

Placement – First, your roof needs to be angled properly – ideally at about 45 degrees facing south. A southern exposure with no overlying shade will guarantee maximum sunshine throughout the year.

- Energy Use You'll need to cut your energy use to make solar panels viable.
   Luckily, you're reading this guide, which provides dozens of tips to cut your bills and energy use down dramatically. Keep in mind that it costs \$9 per watt of electricity to install a solar system. Analyze what you use currently and compare it to your total kilowatt use at the moment.
- Forecasting Determine how much sun you can absorb throughout the year.
   What does the National Weather Service say about your annual sunlight? If you live in Seattle, PV cells probably won't be of much use, but if you live in Arizona, you'll be able to go off grid for a reasonable investment.
- Power Sharing If you're in a state that supports it, remember that you can also resupply power back to the electric company through the power lines. This way, you can stay on the grid and access electricity if it's extra gray outside for a few weeks.

Installing solar power is expensive to be sure, but if you do it right, you can cut down your electricity use and at least supplement a bit chunk of your power to reduce your monthly bill.

#### What You'll Need

There are quite a few parts involved in PV cell installation, but to give you a general idea of what you're paying for and the scope of installation, here's a run through of the parts:

- Batteries Without grid electricity, you'll need batteries to store power when
  you're not using it. This will help ensure you have power when the sun isn't
  shining.
- Charge Controller To control how fast the battery charges and drains, a charge controller is needed. This will lengthen the battery's life and efficiency.
- **Inverter** An inverter converts electricity you gather through your solar cells from direct current (DC) to alternating current (AC). This is necessary so you can use that electricity in your outlets.
- Generator A generator acts as a backup if you're off-grid and run out of battery power. A generator can also be wired to a battery to recharge it if it gets too low

during peak use.

- **PV Cells** The actual solar cells you need will be available in many forms and costs. Higher end cells have been getting far better retention numbers, but the price rises drastically with the efficiency.
- Additional Parts There are a number of other important parts including wiring, junction boxes, disconnects, overcurrent protection, grounding equipment and brackets for installation.

Overall, solar panels are a fun, effective way to supplement the electricity you use from the power company – and the source is free and abundant. Remember to thoroughly research local laws and building codes before starting a project. You may also want to contact a licensed contractor for consultation.

# **Installing Wind Power**

Wind power is becoming increasingly popular as a source of energy for major power suppliers around the globe. The wind never dies, and turbines are becoming less expensive and more efficient with each passing year. However, when you crane your neck up at the 200-foot windmill along the highway, you must be wondering if you could possibly harness the same power efficiently. Luckily, the answer is yes.

#### What You Need for Wind Power

A lot of people assume that you need acres of space, dozens of windmills and highspeed winds to generate enough power for your home. However, recent studies have shown that substantial energy production can occur at wind speeds as low as 11 miles per hour with 100 square feet to build on.

Due to building codes and space restrictions, a windmill might not be ideal if you live in a major city or a crowded suburb, but anyone with a little space in their backyard or who lives in a rural area can easily take advantage of this rapidly advancing technology.

## **Building Your Own Windmill**

Of course, there is the cost issue. Luckily, there are a number of resources cropping up that offer plans for installing windmills by hand using homemade parts. Because a windmill's basic design premise is so simple, homemade windmills are far easier than other renewable energy sources like solar panels.

Before you start a project in your backyard, thoroughly research about what your windmill should include. It does you little good to build a windmill if you don't know how much power you need it to produce or how fast your wind speeds are. Here are some things to consider:

Energy Use – How much energy do you currently use each month, and how much energy can you expect a residential--sized windmill to produce? If you used 800 kWh each month, your windmill would need to produce at least 5 kilowatts to be effective in cutting your energy bill. That would cover roughly 40% of your energy bill. A windmill producing as much as 15 kilowatts would produce upwards of 90% of your power. These numbers vary depending on a number of geographical factors, and if you can lower your electricity use, your windmill will be far more effective.

- Space Review how much space you have to build your windmill. Ideally, you
  want your windmill to be tall enough to rise above any obstructions like trees or
  your home. However, if the wind source is substantial, it doesn't need to go any
  higher than that. For some homeowners, a 20–30 foot windmill is plenty tall
  enough to gather the power needed.
- Building Materials Your windmill will be tall, narrow and jutting into the wind every day of the year. You will also depend on it to produce a large chunk of your electricity so it can't fall down on you during a storm. To combat these issues, make sure you buy only the strongest materials. A deep foundation, metal framing and strong supports are all vital to keeping that windmill upright.
- Electric Components While you can build a large portion of your windmill on your own, including the frame, blades, foundation and head, you'll still need to buy certain parts. There are plans for creating your own turbines and transfer systems, but even if you go the homemade route there, you'll still need inverters, batteries, a charge controller, disconnects and other electrical materials. Make sure to research the market prices for each of these parts. Don't skimp on anything when it comes to your windmill this is your home we're talking about.

Ideally, well before you start construction, you should know how big of a windmill you need, how much space you need, how many parts you need, and what it will all cost you. If any of those details are fuzzy, go back to the drawing board and continue your research.

#### Plans and Parts for Your Windmill

When the time comes to start building, you'll need to have plans that have been successfully used by other do-it-yourselfers for their windmills. Do a quick Google search and you'll find a LOT of plans, but how many of them meet our criteria? Not very many.

To start with, your plans should be easy to understand. I'm going to wager a guess and assume you're not an electrical engineer. If you like to fix things, tinker in your shop, and do odds and ends around the house, recognize that a windmill is a big leap; having solid, well-written plans is important.

Beyond the writing, however, you'd better have clear illustrations outlining what to do at each step of the process. Look for clear measurements for braces, foundation settings and blades. When it comes to anything that channels electricity, accuracy is vital. Don't settle for instructions that leave you not quite clear on what to do next.

It's also important that your guide outlines exactly what you'll need to finish the project. A lot of the time, plans and guides written by do-it-yourselfers will skim over some details that they didn't remember to mention. The last thing you want is for your windmill to come crashing down because you didn't know about a joint you needed at the pinnacle of the braces. Not only should you know which parts you need; you should know sizes, brands and styles that will match up with your windmill.

#### **Catering to Your Home**

Windmills are fantastic in almost any climate and region. There are very few places that have no wind. Even if you live in such an area, a windmill can produce enough power to help cut down your energy bill at least a bit. But, you still want to be sure that your final design will fit in with your environment.

The windmill should be air and water tight to avoid any leaks or electrical shortages. It should also be tall enough to get above the trees in your area, and if you live with neighbors nearby, you should be sure it won't make too much noise. In the past, many do-it-yourselfers have had their windmills taken down due to noise ordinances in their area.

A good windmill can put a big dent in your power bill, but it needs to be built to fit your particular needs. Once you know what your home needs to get off the power grid, you can find plans that will specifically match up with your region, municipality and energy needs.

# 30 Money-Saving Tips You Can Use Right Now

Every year, there are millions of Americans struggling to make ends meet, and most of them never realize that they could save hundreds if not thousands of dollars by making some very simple changes. For those of you in search of cost-cutting solutions that don't turn your life into an episode of Survivor, here are 30 simple, easy to follow tips you can implement today.

- 1. Combine Your Utilities If you pay over \$100 a month for cable TV, you can probably save a lot of money by adding in your cable Internet and phone bill to the same package. Many times, cable companies and phone companies are able to offer packages of all three for around \$100 a month. You may lose some of the 500 channels you currently enjoy, but remember, it'll take compromises to save a few dollars.
- 2. Send in Rebates and Use Coupons Remember all those rebates you got from Best Buy last year for your home office equipment? Did you send any of them in? Rebates may seem like a pain to deal with, but they are basically free money. If you receive rebates or coupons for things you already buy, put them in a folder somewhere, and act on them once a week. This will ensure you never space on sending them out.
- 3. Refinance or Consolidate Loans If you have loans or major debt, consider consolidating or refinancing to get better interest rates. Student loans and mortgages are great examples as they allow you to pay off the debt faster and with a fixed rate to reduce interest charges.
- 4. Borrow, Don't Buy If you want to read a book, watch a DVD or listen to a CD, borrow it from the library or a friend instead of buying it brand new. The cost of entertainment alone can add up extremely quickly. Consider services like Netflix for DVDs or Pandora Internet radio for music both of which have low subscription fees.
- **5. Magazine Subscriptions** If you currently buy magazines (or newspapers), replace those hefty monthly fees with a single subscription cost. Most magazines can be had for an 80% discount if you subscribe for the whole year.
- **6.** Order or Buy Groceries Online These days, you can buy nearly anything online. Add your groceries to that list. Services like Fresh Direct and websites like

Amazon make it easier than ever to order food in bulk at big discounts. You not only cut back on what you spend on groceries; you cut down on how much you must drive to get them.

- 7. Pay Down Credit Card Debt Debt is a big part of most people's bills. Some people spend as much as half their income paying off loans, credit cards and other debts. Instead of spending hundreds of dollars a month on interest charges, pay down those cards, and stop using them to buy things you cannot afford.
- 8. Wait for a New Car Unless your car is falling apart and can't go over 55 miles per hour, you don't need a new one. Avoid the urge to spend money on the flashy new sedan you saw on TV. It's not necessary, and you're adding yet another bill to your list.
- **9. Pay Bills Annually** A lot of bills can be reduced by paying them in a lump sum upfront. Car insurance, life insurance, phone bills, oil heat, and many others offer plans to pay upfront and save as much as 25% of the total. It may seem like a lot to spend, but it's far more cost efficient.
- 10. Cut Back on Gifts Gift giving adds up significantly, especially around Christmastime when so many gifts go out. You don't have to stop giving gifts, but cut back on them as much as you feel comfortable. Find ways to show your love without maxing out a \$5,000 credit card every year – you'll feel far less stressed come January 1<sup>st</sup>.
- 11.Make Your Own Lunch Lunch is a huge expense for many of us. If you work 5 days a week and spend \$10 a day on lunch, that's \$2600 a year just to feed yourself while at work. What are the alternatives? Bring something from home. A brown bag lunch can cost as little as \$2 and often includes *more* food than takeout plus it's healthier. Another tip: don't spend so much money at coffee shops. That \$5 latte could easily be replaced by a thermos of coffee from home that costs twenty-five cents.
- **12.Cook Meals for Dinner** Again, eating out is expensive, but now we're talking about your whole family. What did it cost the last time you took the entire family out to your favorite restaurant? \$50? \$100? That same meal could be made at home with bulk foods and fresh ingredients for as little as \$10 for four people.

- 13. Join a Wholesale Club like Costco When it comes to buying food and household goods, no one has better deals than Costco. The membership is only \$50 per year, and you'll be able to take massive discounts on everything from milk and vegetables to toilet paper and toothpaste. It may be a hefty monthly shopping trip, but it's well worth the savings.
- 14. Use Free Software If you have a home office or simply use your computer for a lot of personal projects, consider downloading and using free software options instead of pricy retail tools. Google Documents and Open Office are great replacements for Microsoft Office while Paint.net offers many of the basic tools that Photoshop does for \$600 less than its pricy counterpart.
- 15. Cut out Snacks and Drinks A lot of what you spend on food could be completely cut out simply by eating less. Evaluate how much you spend on things like potato chips, candy, sodas and other junk food, and start cutting it out. Even if you replace it all with more expensive fruits and healthy snacks, I can guarantee you'll spend less in the long run. Another big money waster: beverages like soda, energy drinks and alcohol.
- **16. Exercise and Eat Healthy** By eating healthier and exercising regularly, you'll save money in a number of ways. First, you'll have more energy and get more done. Second, you won't need to buy as many medications or see the doctor nearly as much. Finally, you'll be happy going for a walk or talking with your family. You won't need so many distractions and extra gadgets to keep you happy. A healthy body is a happy, inexpensive body.
- **17.Save Leftover Change** Don't toss change away or leave it in your car. Get a change jar to start saving it for future use. By setting aside all the extra pennies and nickels you get, you can come away with hefty three-figure paydays every few weeks.
- **18. Create Monthly Budgets** One of the easiest ways to save money is to know what you're spending it on. A monthly budget is vital to help you understand what you actually need and what expenses are frivolous. Check in on your budget at least once a week, adjust as necessary, and try to get as close to the minimum spend as possible.
- **19.Save Money in a Money Market Account** If you are trying to save money, make it work for you. Eventually, you'll want that money going into CDs and IRAs, but for now at least get a money market savings account. Even just extra

- savings in your bank account will make small amounts of profit each week by staying here.
- 20. Plan Grocery Shopping Trips The easiest way to waste money at the grocery store is to go in without a clear plan. Sit down once a week and make a list of everything you need, using recipes and your current needs as a guide. Then, when you go into the grocery store, don't buy anything that's not on your list. By limiting your trips to the store and cutting out unnecessary purchases, you'll remove impulse buys from your budget.
- 21.Don't Pay Unnecessary Fees There are so many fees out there that you may not even realize where your money is going. Of course there are credit card fees, but there are also late fees if you forget to pay a bill on time, transaction fees if you use the wrong ATM, and overage fees if your subscriptions don't cover your service. Take a look at your last bank statement, and try to cut out as many of those fees as possible.
- **22.** Research Prices Online Before you buy anything, sit down and look at the varying prices online. Impulse buys of major appliances or electronics can cost you hundreds of dollars.
- **23. Don't Drink Bottled Water** Bottled water is a massive waste of money; plus it's awful for the environment. Get a stainless steel or reusable plastic water bottle, and fill it up instead. You can always get a filter if you don't like your tap water.
- **24. Stop Smoking** Smoking is expensive. From \$5 a pack in most states to \$13 a pack in New York, you could be spending anywhere from \$1500 to \$5000 a year on this nasty habit, not to mention the future cost of health care.
- **25. Drive Your Car Less** Driving costs money. So, instead of driving three blocks to work each day, get a bicycle or start walking. Public transportation is also a great option, or you could carpool with people going your way.
- **26. Take Care of Your Pets At Home** Pets don't have to be so expensive. Instead of spoiling them with expensive wet foods, stick with simple dry food from a reputable brand. They won't know the difference, and you'll save money. Also, consider clipping nails, brushing teeth and deworming at home all feasible if your furry friend is well behaved.

Want to save money and help the planet? Grow your own aquaponic veggie garden:

Aquaponics

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- 27. Review Tax Savings Take a closer look at your income tax return next year. You may be getting less back than you should. If you're using any of the renewable energy tips in this guide, you can likely deduct them from your bill. Plus, there are plenty of deductions for children, green automobiles and business expenses.
- **28. Have a Garage Sale** Get rid of your old stuff the best way possible with a good old-fashioned garage sale. If you're not a fan of strangers on your lawn, go online and use eBay or craigslist instead. Throwing out old stuff is almost never necessary. Someone likely wants it.
- 29. Buy Used Items Instead of buying brand new electronics, cars, clothing or other goods, look for used options. Again, eBay is a great tool for finding used items, or you could talk to your friends and family to see if they have anything available.
- **30. Cut up the Credit Cards** Get rid of the credit cards. Paying for things with credit is the single fastest way to lose money. A \$500 credit card would take three years to pay off if you paid the minimal balance, and you would end up paying nearly 200% of what you originally spent. Why do that when you could use cash and limit your spending?

This is only getting started, and don't forget the 20 methods to save money on your utility bill we already discussed. The opportunities to cut your bills, save money and start saving for the future are nearly endless. The earlier you get started, the sooner you can relax and enjoy a life without hefty bills and massive energy consumption.

## Conclusion

Some people never stop and think about where their money is going. They spend indiscriminately, throwing cash into the dustbin instead of setting it aside for retirement, college or other expenses that are almost sure to come up in the future.

In today's economy, with our energy sources running lower by the year, it won't long be possible to ignore changes that you *need* to make in your spending habits. So, sit down with your family, review your expenses, and start slashing them down to size. Review the renewable energy you could be using right now and how much less energy you could be using with some simple, pain-free changes.

Trust me, the grumbling will die down. The right habits might even mean an extra vacation or a few extra outings with the kids. Saving money is only a small part of the equation, but for your family, it can make all the difference.

Watch these videos for more money-saving tips for your eco-friendly lifestyle:

Slash your power bill with your very own home energy system

# **DIY home energy**

Simple DIY method for generating free electricity

# **Stirling solar**

Save money by growing an organic veggie garden

## **Aquaponics**

These free videos have been hand-picked for your enjoyment! Take the time to watch them now – they will help you to save a lot of environmental impact and money.