

## IT'S EASY TO SAVE MONEY

It's surprisingly easy to save money on your utilities bill through energy conservation. We've tips that will save you money by saving energy. We will take a wander around the house into the garden and even look at the car to give you a few tips that are easy to implement and you can save Euros immediately!

### Lighting

#### Turn out the lights!

Even though your father was right... you don't have shares in the ESB so turn the lights off! About 5 - 10% of your electricity bill goes into your light bulbs, so this could really make a difference. By the way this rule applies to both incandescent and fluorescent lights. Turn off the bathroom light even although you know you will be back in 3 hours!

#### Change to energy saving bulbs

Find substitutes for energy wasting lamps and fixtures.  
For example use a table lamp instead of an overhead light when reading at a desk.

#### Use a nightlight

Use a nightlight in hallways where you don't need the full overhead light and be sure to turn off the nightlight during the day. If you are using a 100-watt bulb in the hallway replace with a 75-watt bulb.

#### Dust light bulbs

Dust your light bulbs and shades regularly. Seriously, dust absorbs light that you could be using.

#### Dim the lights where you can

Putting in a dimmer switch gives you the choice of how much light you have in the room. High for reading or low for ambience

#### Decorate with light in mind

Light coloured walls reflect more light, keep this in mind when you're painting next as you will need less lights.

#### Optimise outdoor lighting

No surprises here, the more efficient your outdoor lights are and the less you use them, the less energy you will waste. There are some really neat products available now that will help you on both points.

## **Motion or Light sensing**

Put a motion or light-sensing control on the outside lights to turn them on only when you need them.

## **Floodlights**

For floodlights, high-pressure sodium lights are the most energy-efficient. Halogen lights are the least efficient, so if you don't like the sodium lights, try cold-start compact fluorescent or metal halide lights.

## **Solar Lights**

There are some nifty solar-powered lights you can buy that soak up sunlight during the day and cast a gentle glow on your patio or the pathway to your door at night. No buried cables, no extension cords.

## **Water**

### **How to Shower**

Since showering takes up about 20 percent of indoor water use in the average home, we will give you some ideas on how to use the least amount of hot water possible this could save your water heater serious effort and you serious money.

First things first: install a low flow showerhead. They have significantly improved since the old days when they emitted a light mist--great for plants, horrible for rinsing conditioner out of your hair. The new ones really work, so you have no excuse now. FYI: a low-flow shower head usually works by mixing air into the water flow, which is restricted to increase the water pressure.

If you don't know if you already have a low-flow showerhead, try this neat party trick. Hold a half-gallon container to catch all the water from the showerhead. Turn the valve on full blast. If the container takes less than 10 seconds to fill get out the wrench. It's time to replace the showerhead.

If you have to adjust the water temperature mid-shower, lower the hot first if it's too hot. Lower the cold first if it's too cold.

Another water-saving tip you probably already guessed: take shorter showers. Don't relax. Don't meditate. Soap up, rinse and get out. Cut your shower in half and you cut out half the hot water you would have used, no matter what type of showerhead you have.

Think about this. If you take a 5-minute shower with a 2.4 gallon per minute (low-flow) showerhead instead of a 10-minute shower with a 3.5 to 6.0 GPM (standard) showerhead, you'll save 23-48 gallons of water. Quick, how much does that add up to a year?  $365 \text{ days} \times 23 \text{ gallons} = 8395 \text{ gallons}$ ;  $365 \times 48 = 17,520 \text{ gallons}$ . Now multiply by the number of people in the house. Finally, pick your jaw up off the floor and start taking shorter, low-flow showers.

Don't shave in the shower; use the sink. Run the water only as needed or partially fill the basin with warm water. Shave after your shower when your skin is already soft, warm and wet.

### **Making the Most of Your Water Heater**

Even if you don't want to install the newest energy saving water heater tomorrow, you can still get your old water heater in better energy shape.

Wrap your water heater up in a nice cosy insulating jacket, particularly if the heater was made before 1992. It will reduce the heat lost through the walls of the tank by 25-40 percent. These jackets work well on brand new water heaters as well as old ones, although they lead to more dramatic energy savings on the older models. But don't put a jacket on a model where the manufacturer says not to. And make sure you don't cover the thermostat. Don't restrict the air inlets on gas- or oil-fired water heaters either.

Set your water heater at 120 degrees Fahrenheit. That should be plenty comfortable.



Each 10 degree reduction in the water temperature setting cuts the heater's energy consumption by 3-5 percent. (You should be washing clothes in the "warm" or "cold" wash and rinse settings anyway.) Your dishwasher will still get dishes clean if it has an internal heater to finish heating the water to 140 degrees. If it doesn't have an internal heater, keep the water heater at 140 degrees.

When you go on holiday, turn the thermostat on the water heater off, or at least turn it down to its lowest possible setting. If your heater has a pilot light, make sure you know how to relight it when you get back.

Insulate your hot water pipes to reduce heat loss on the way to the tap. Put in heat traps or one-way valves in the pipes to cut loss, too.

Insulate the first 3 feet of cold-water pipe connected to water heaters, too.

Most water heaters live 10-15 years. If yours is in its Golden Years, have a plumber look at it and advise you on how much life it has left. If it is starting to go (or is just very inefficient) it may make sense to put it to sleep now and replace it with a more energy efficient water heater. Don't wait until it breaks on Christmas Eve and you have a houseful of guests. It takes longer than 20 minutes to sort through the many options and pick the best, most efficient water heater for your needs.

## **Kitchen**

### **Opting for Optimal Ovens**

Convection ovens are more energy-efficient than standard ovens. They continuously circulate heat around the food which distributes the heat more evenly so temperatures and cooking time can be decreased. You end up saving about a third on energy use.

Self-cleaning ovens, both gas and electric, are more energy efficient than those without the feature because of their extra insulation. But be sure not to use the self-cleaning feature more often than once a month, since it burns energy. (Please pardon the pun.)

Look for an oven with a window in the door so you don't let out the heat checking to see if dinner's done. If you cook without ever opening the door to check, you could save energy by getting an oven without a window. But I don't know anyone who cooks this way.

Microwave ovens without any frills are efficient compared to regular ovens. Using a microwave will reduce your energy consumption by about two-thirds compared to using a regular oven. Microwaves also create less heat so require less air conditioning in the summer.

The most energy-efficient microwaves have frills like temperature probes, variable power settings, and controls that turn the microwave off when the food is cooked.

### **Energy Saving Cookware**

Choosing the right pan for the job can actually save energy--small amounts per meal, maybe, but they add up.

Remember to use the smallest pan you need for the dish you are making since smaller pans take less energy to heat up. Then put the pan on the burner that fits it best. Make sure the pan covers the burner without going more than an inch beyond it. If the burner is wider than the pan, you are wasting energy. Remember that smaller burners use less electricity.

Every type of heating element on an electric cook-top (coils, solid disk elements and radiant elements under ceramic glass) will work significantly more efficiently when the bottom of the pan is flat. In fact, the most efficient pan has a slightly concave bottom, which flattens out when the metal heats up. The more rounded or warped the pan, the less direct contact it has with the burner so the harder the element has to work to heat up the pan. For that reason, those old battered pans from the '50s you've been using may be costing you money.

Copper-bottom pans heat up faster than other pans. (And they look neat, don't they?)

The tighter the fit on the pot lid, the less heat escapes.

Using glass or ceramic pans in the oven allows you to turn down the temperature about 25 degrees Fahrenheit and still cook the food in the same amount of time.

Pressure cookers, which build up steam pressure, reduce cooking time and energy use.



### Using Your Fridge/Freezer Smartly

Here are some things to do to feel good and save energy:

You aren't a teenager anymore. (Actually, we are guessing on that one.) You don't really need to spend half an hour taking inventory every time you open the fridge. Think about what you want before you reach for the door. Better yet, get in the habit of keeping items in the same place in the fridge (e.g., milk in the door, eggs on the second shelf, chocolate cake front and centre) so you don't have to rummage through the food, letting cold air out.

Label items in the freezer clearly so you don't spend a lot of time with the door open trying to identify mystery casseroles from four months ago.

Make sure foods are covered before you put them in the refrigerator. Otherwise the moisture in them will evaporate, which makes the refrigerator use more energy.

All right, be careful with this next tip. You want to let foods cool before you put them into the refrigerator or freezer. But don't leave food out so long at room temperature that you start growing salmonella, botulism or other nasty food poisoners. Don't leave food out on the counter for longer than 30 minutes.

Your freezer works more efficiently when full than when nearly empty, so put some plastic containers like old milk bottles with water in them in the freezer to take up empty space. Really. This isn't a joke.

### Fixing the Old Fridge/Freezer

Even if you don't have one of the brand-spanking new refrigerator or freezer models with their higher efficiency standards, you can still take some steps to make your current one as efficient as possible. Come to think of it, these steps will help the newest models live up to their potential as well.

Defrost your manual-defrost freezer when ice or frost builds up a quarter inch or greater.

Clean off the dust at the back of the refrigerator and around the motor area at least once every 6 months. Use a narrow brush and vacuum cleaner.

Move your refrigerator and freezer away from the cooker, dishwasher, direct sunlight and other heat sources so they don't have to work as hard. Freezers can go in the garage or basement to raise their efficiency.

Make sure there is a minimum of 1 inch space on each side of the refrigerator and the freezer to let the air circulate. Better yet, give the back of the refrigerator 4-6 inches of space.

Defrost your manual or partial automatic defrost refrigerator and freezer when ice or frost builds up a quarter inch or greater, we know it's no fun, but it's also no fun to pay the increase in your electric bill to keep food cold in machines with iced-in coils.

Finally, check the seals on your doors. A neat trick to use on older models that don't have magnetic door seals is to close the door on a €5 note. (Use a twenty if you have something to prove.) Try this in 5 locations

around the door. If the door doesn't hold the note firmly in place you probably have leaky seals letting cold air out.

Also look for cracks, breaks, or brittleness in the rubbery gasket that goes around the door. If you notice these you should replace the seals.

One last hope if the seal is not good on the door:

Is the door out of alignment? Check by lifting the door (gently!) to see if there is any play. If so, tighten the hinge screws and recheck the seals.

If you need to replace the seals, it really may be time to buy a new, high-efficiency model since installing new seals can be pricey!

## **Dishwashers**

### **Energy-Efficient Dishwashing**

No matter how new or old the dishwasher you're using, follow the following for better energy use:

Run only full loads in your dishwasher. Fill the racks according to the manufacturer's instructions

Run the dishwasher at off-peak times (like bedtime) to take advantage of any lower rates your electricity company offers.

Choose the "light" wash setting when you can as it uses less water and runs for less time. Next best is the normal cycle. Use the "heavy" or "pots/pans" cycle only when the load is quite dirty.

Air dry the dishes instead of having the dishwasher pump hot air over them. Either choose the no-heat drying option if you have one or just turn the dishwasher off after the end of the rinse cycle.

This next tip pains me to say as it goes against everything my mother taught me, but here goes. Do NOT rinse dishes before putting them into the dishwasher. Those who should know say that modern dishwashers can do the job without help. At least scrape the dishes into the waste-bin and drain liquids off the dishes before putting them in the dishwasher.

By the way, they say that it takes more water (therefore more hot water, therefore more energy to heat water) to hand wash dishes than to run a full load in the dishwasher, particularly if you hand wash small loads and rinse each piece individually.



## **Car**

### **Fuel Economy - Savings can be made**

Given what's been going on at the fuel pumps over the past few--well--years, all tips to reduce petrol consumption are to be welcomed, here's a couple to get you started:-

First, slow down. Research has found that one car increased its petrol mileage 5 mpg when it dropped the speed 10 mph. So the car went from 30 mpg to 35 mpg when its speed dropped from 72 to 62 mph. It went up again to 40 mpg at 50 mph. You should also become more familiar with the speed restrictions on Irish roads.

Next, don't accelerate when climbing a hill. The engine works harder then, so apparently it eats up the petrol. Think about how much more energy it takes you to run up a hill versus just walking. It may be great for using up calories and losing weight but not so great for saving petrol.

Keep down the wind resistance. When you leave the roof rack on the top of your car, or decorate your aerial with a flag or ping-pong ball in a hat (what is up with those things?), you cause extra drag on your car that the engine has to work harder to overcome.

Guess where it gets the extra energy to do that...directly from your wallet via the petrol tank!

You can improve your fuel efficiency by about 6 miles per gallon on the motorway by taking off the roof rack when you don't really need it.

Get your car in to see its mechanic. One source we chatted to said that a vehicle that is properly serviced runs more efficiently--maybe as much as 10 percent more efficiently. Check the owner's manual for the schedule of when to service what.

Turn off all the accessories before you park your car, especially the air conditioning and any stuff you've plugged into the cigarette lighter. It turns out that the higher the electrical load on the car, the less fuel efficient it is. Who would have guessed?

And finally, empty out all the stuff you don't really use. For every 100 pounds of weight you add to your car you decrease its fuel efficiency by 4 percent.

### **Your Tyres**

There are a couple of ways to get the best fuel efficiency out of your tyres: choose the right tyres and keep your tyres filled to the right level.

Choose wisely. First things first: choose a tyre that meets your needs. If you're driving through ice and snow, or it rains every day where you live, get a tyre that works well in those conditions. It's not worth spinning out on an icy bridge or sliding through a stop sign into a busy road to save a few Euros on petrol.

Fill 'em up. Having your tyres under-inflated does wonders for grabbing the road, we're told. However, if you don't have to race in the rally of Ireland anytime soon, fill them up to the car manufacturer's recommended pressure, or psi and drive a little more carefully around those corners. You'll save petrol and tyre tread.

What's the right psi for your tires, you ask? Look for a little sign on the driver's door jamb. If it's not there, check the owner's manual for where the sign is on your car. You'll probably find that in the glove compartment. (it might even tell you the right psi without making you bend over and squint at your car in your driveway.) Then, get out the tyre gauge and check the tyres every month.