



HOME ENERGY HACKS

WITH SUPER SAVINGS CHECKLIST

HOME ENERGY HACKS

Hack:

A tool or technique that makes life easier or more efficient. These “Home Energy Hacks” will give you easy and practical ways to increase the thermal comfort and energy efficiency of your home, without breaking the bank or being a hassle to maintain.



ABOUT TANYA



I was registered disabled while suffering from Lyme Disease when I received a shockingly large gas bill. My journey to find a way to make utility bills easier to understand took me from inventing a live energy monitor, through working with the Government to ensure that 26 million homes in the UK will receive an In-Home Display with their Smart Meter.



During this process of commercialising an idea I worked in hundreds of homes gaining valuable knowledge on energy saving.

I now work with “hard to treat” buildings with my amazing team, on old and often listed buildings, making them energy efficient by installing InvisiThermTM secondary glazing and draught proofing system InvisiSealTM throughout Scotland with my company Glaze & Save.

HOME ENERGY AN INTRODUCTION



At Glaze & Save, we're passionate about helping households and businesses save money on their energy bills. Our CEO Tanya Ewing has worked tirelessly over the last ten years, sharing her knowledge of energy efficiency with as many people as possible.



Energy saving ideas for your home

Energy saving doesn't have to be costly or inconvenient. There are many "soft options" that save you money with the minimum of hassle and fuss. In fact, we'd highly recommend that you tackle your energy efficiency woes with these simple solutions before investing in expensive energy saving measures. Sometimes a little really does go a long way!

“There is so much focus on big spending solutions such as solar panels, but in my view not enough focus has been given to low spend solutions with quick payback, or simply changing behaviour through the power of knowledge. I'm sharing this information to let you see how many solutions there are out there to reduce your energy bills and make your home warmer.”

Dr Tanya Ewing PhD (hd) FRSA, CEO Glaze & Save

ENERGY INEFFICIENCY AT A GLANCE

Historic buildings are part of our heritage, telling stories of times past while often displaying impressive and awe-inspiring architecture and design. However, years of wear and tear, unsympathetic retrofitting or simply advances in modern house buildings technologies can often render historic buildings incredibly energy inefficient, leading to high fuel and running costs, maintenance and preservation issues, and an otherwise poor public perception as resource inefficient and wasteful.



So just where is all of that energy escaping to?

The most common culprits in all homes (not just historic homes!) are as follows:

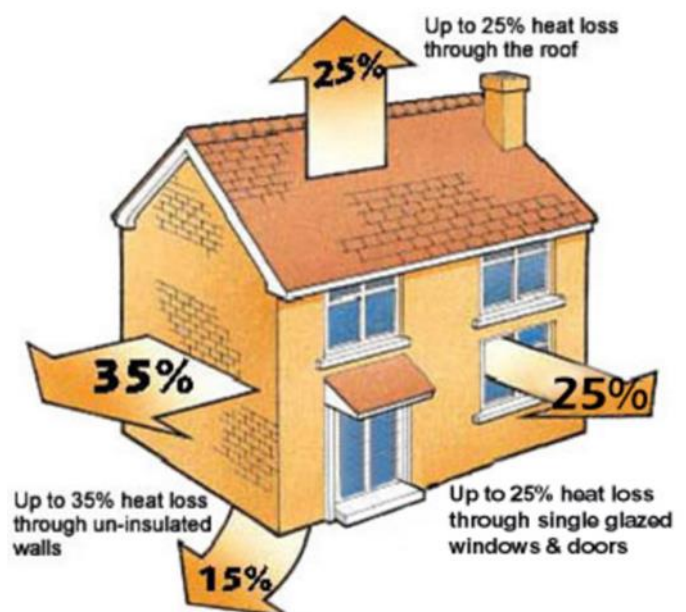
Roofs

Windows

Walls

Floors

Doors



Although opinions on the exact amount of energy lost from each of these areas differ, general consensus is that making positive changes in each area is sure to make a huge impact on your energy consumption.

UTILITY METERS EXPLAINED



Dumb Gas Meter

Smart Gas Meter

Knowing the difference between a dumb meter and smart meter is key to keeping on top of your utility bills: it's how I started out and what led me on my journey to inventing an In Home Display and concept that will be rolled out across millions of homes.

A meter is simply that: it meters your gas, electricity or water usage and is not designed to be interacted with in any way by the consumer.



Whereas, an In Home Display gives you real time knowledge of the energy that is being used, in your home or business. It is a live and easy to understand tool to help you read the energy usage of your home. More importantly, it allows you to have a much clearer understanding of what everything in your home costs to run and therefore make informed choices about your energy usage.

HEATING CONTROLS

Most of us have heating controls that we don't understand or are unable to control. By getting to know your heating controls, you can improve the thermal comfort of your home while saving money at the same time.



Getting to grips with your heating controls can save you an average of

15% on your energy bills without compromising your warmth.

You can also consider installing smart controls such as NEST or HIVE to your existing heating to give you a better understanding of your heat usage.

HEATING THERMOSTATS

Turning down your heating by 1 degree can save you up to 10% on your heating bill.

A lower temperature could mean greater comfort: try reducing your thermostat one degree at a time until you reach a temperature you are comfortable with. Many home owners comfortably set their thermostats to 19 degrees (although keep in mind babies, the elderly and the infirm may require a higher temperature to feel comfortable).

CHOP CLOC



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Chop-Cloc is a new innovation in managing the thermal comfort of your home. Working alongside your current thermostat, the Chop-Cloc allows you to heat your home more efficiently while saving money. The Chop-Cloc uses a time based heating control to create more off time on your heating system, which reduces how much fuel you use without affecting your comfort. The Chop-Cloc is a great innovation for people who are at home all day and want to keep the property warm without worrying about rising heating costs.



ROYAL FLUSH

If your central heating system is not at peak performance, then you might need a power flush. Flushing your central heating system with a high-pressure pump will remove all of the gunk and debris that stops the system from running effectively; saving you money and saving energy! To prevent future build up and saving you even more money, invest in one of the many filter products on the market to keep your heating system sludge-free and in optimum condition.



ENERGY CONSUMPTION

You don't always need to have an In-Home Display or smart meter to better understand the energy usage of your home. This can also be done with plug in devices that show you the individual use of each appliance. Simply plug your existing appliances into the plug-in device and it will calculate the energy usage.



However, you don't always need to have an In-Home Display or plug in devices to keep you on track with your appliances' energy consumption. If you can hear an appliance making a noise, it's taking power from the grid! So be sure to turn off plugs at the socket and change appliances from "standby" to "off": I saved over £200 per year just by doing this!

A WORD ON VENTILATION

Ventilation is fundamental in ensuring home comfort. As well as preventing air pollutants from disturbing the health and happiness of your home, adequate ventilation also allows for moisture in the air to be dealt with, avoiding condensation and damp issues. When carrying out any upgrades to your home, it is important to opt for breathable materials (often called "open cell") and to bear in mind that measures which promote air tightness can also cause issues with ventilation.

LOW COST EASY INSTALL SOLUTIONS

So how can we make our homes warmer and improve thermal comfort without breaking the bank?

Well, it's actually quite simple: stop the draughts and understand how to keep the heat in. So let's look at some examples of how you can easily achieve this.

- ✓ **Low Cost**
- ✓ **Easy to Install**
- ✓ **Quick Payback**
- ✓ **Improve Thermal Comfort**



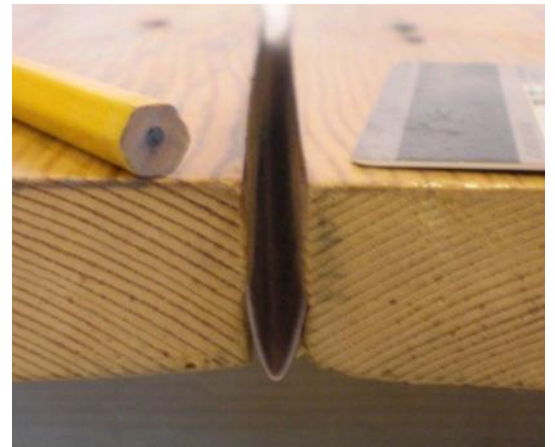
COMPLETELY FLOORED

The small gaps between boards add up to the equivalent of a small window. No wonder your toes are feeling chilly! Drive away the draughts with one of these simple steps.

Silicone or decorator's caulk is easy to apply to floor board and skirting boards, and is available in a variety of colours. Caulk is easier to work with as it is powder based, and is best for the top of skirting gaps. It can also be painted over. Silicone, on the other hand, is best for skirting gaps, and for use in bathrooms and kitchens as it is water resistant for easy cleaning.

Caulking isn't the only solution to draughty floorboards. There are specialist products available to ensure a sleek finish that maximises your thermal comfort.

Filler strips are becoming increasingly more popular, as they allow you to effectively deal with the gaps while creating a sleek and virtually invisible look. Brands such as StopGap (pictured) sit neatly between the floorboards, eradicating underfloor draughts without compromising on the look of your flooring.



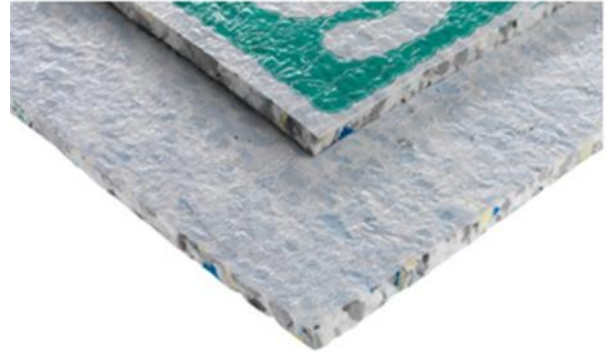
COMPLETELY FLOORED



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Just as you would with your duvet, you can choose a tog for your underlay. 3.7 tog is now easily available in most flooring stores.

Invest in high quality insulation underlay under any carpets on the ground floor of your property. You can now buy extremely effective underlays that promote the U-Value.



U-value is a measure of the heat transmission through a building part (such as a wall or window) or a given thickness of a material (such as insulation or underlay) with lower numbers indicating better insulating properties.

Another top tip for ensuring you maximise the warmth of your floor is to lay rugs in the places where your feet will be. Make sure that you place rugs partially under sofas, chairs, dining tables, desks and anywhere else where your feet might find the floor to keep them snug and toasty!



BED & BOARD



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If you suffer from a cold bed due to placement against an external wall, invest (or make) in a sturdy insulated headboard to keep you warm: and move your bed off of the wall by a few inches to allow warm air to circulate.

REMEMBER YOUR JACKET

Adding an insulating cover to your hot water tank can help save you energy and money: using a hot water cylinder jacket that is of British Standard and between 20mm and 80mm thick could save you around £20 per year, while keeping your water hotter for longer.



IT'S CURTAINS FOR COLD WINDOWS

During the day warmth comes through your windows. But did you know if you close your blinds, curtains and shutters 1 hour before it gets dark you can keep up to 5 degrees in your home?



Curtains aren't just for windows though; they can also be used to keep on exit doors to keep draughts at bay. Invest in a heavy fabric or use an insulating lining to give your door curtain some weight.

You can also increase the thermal efficiency of your windows by using insulating blinds, or if you're lucky enough to have them, working shutters.



DRAUGHT BUSTERS

External Doors

Draught-proofing your external doors is a no-brainer: and using superior products that last not only saves you money in the long run, but are better for the environment.

A good quality door bar with brush or rubber surround and letterbox cover will also lock in the warm air without breaking the bank. Or invest in high quality liquid silicone draught proofing for that “new door” feel.

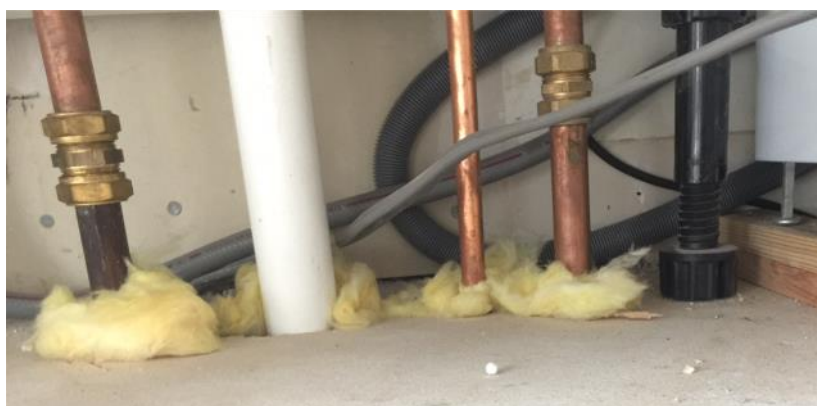
Fixtures & Fittings

Ensure you plug any gaps in your fixtures and fittings, using insulation, caulk or even (where safe) paper. This will ensure that every potential draught is blocked up.



Pipes

An effective and speedy fix for any pipe coming up from the subfloor is to put some removable draught-proofing down these holes. This five minute hack is great for kitchens and bathrooms and holes, and can create a five degree temperature rise!



Tanya's Hot Tip

Use brown insulation, the yellow and pink make you itch!

DRAUGHT BUSTERS

Tackling draughty areas of your home is a sure fire way to make it more energy efficient, and more comfortable to live in too! Did you know that decorator's caulk can be used to fill in gaps throughout your home, making it an inexpensive and convenient way to get draught-free.



Sometimes the biggest results can come from the smallest changes. It has been our experience that once you tackle the big draughts, the smallest draughts become all the more prevalent! So even though you may not feel it, investing in a key hole cover can ensure that you are not plagued by the tiniest of annoying air flows.

Key hole covers, often called escutcheons, are usually comprised of brass or a similar metal, and comprise of a coverplate to go inside the door and another without a coverplate to go outside.



Tanya's Hot Tip

Your electrical sockets can give off draughts: using a simple safety plug can prevent draughts while keeping your home safe.

DRAUGHT BUSTERS

Draught Proofing Tape

Draught proofing tape can be a great, inexpensive way to insulate the gaps around your windows and doors. The tape is usually self adhesive and sticks easily in the gap between the window or door and the frame.



Draught Excluders

Your granny had them for a reason! Draught excluders are a great way to stop under-door draughts without breaking the bank. They can be purchased relatively inexpensively, or you can create your own from fabric scraps stuffed with newspaper.



UP IN SMOKE



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If you use a wood burner for warmth, be sure to close the vents when not in use, otherwise you will find warm air escaping in much the same way as with a chimney. Doing this can save you around 10% on your energy bills.

A stove fan is also a great way to increase the thermal comfort you experience from your wood burner, while reducing the energy demands on it.

Much like a radiator fan, the stove top fan prevents warm air from rising to the ceiling, instead pushing it out into the room and creating a more comfortable, cosy space.



Tanya's Hot Tip

Closing the vents of your wood burner will create kindling to get your next fire going: creating even more savings!

RADIANT RADIATORS

Adding radiator foils to the back of your radiators can ensure that you get maximum impact from their heat, reflecting up to 96% of radiator heat back in to a room. Where your walls have a poor thermal performance or lack insulation, or are situated on external walls, this can be a particularly great energy saver. If you have five radiators on external or poor performing walls, you can save around £20 per year with radiator foils. Radiator reflectors can easily be made to fit individual radiators for invisible but effective fit.



NUMBER ONE FAN

A fan is a great way to improve the energy efficiency of your wood burner or stove. Using a special fan which is designed to improve the circulation of heat generated from your wood burner or stove, you can easily avoid hot and cold spots, while improving the reach of the warm air from your wood burner.

You can also utilise radiator fans to push the warm air back into a room instead of allowing it to rise to the ceiling. Radiator fans are inexpensive ways to keep heat a “person level” where it’s needed, and makes the most out of your radiators.



LOFTY GOALS

Insulating our lofts is something that is par for the course these days, but what about insulating your loft hatch door? It's an easy spot to miss. The two areas you need to focus on is the door itself and the gap around the door when it is closed. Use window draught tape to seal the edges and fix some carpet underlay to the door for maximum insulation.



COVER UP

Draughts will find their way through anything, so it pays to invest in products that will avoid draughts at the outset. Ensuring that your kitchen and bathroom fans and vents are fitted with covers will eradicate the gusts that come through open vents.



UP ON THE ROOF

Chimney

Don't forget your chimney! 10% of a home's heat can be lost through it's chimney.

During the summer, or for chimneys that are rarely used, invest in a chimney pillow to eradicate draughts and stop all of your lovely heat going straight up the flue! Chimney pillows are cost effective and easy to install: they can also be easily removed when you want to use your chimney.

Its good to support the wool industry, these cushions come in over 9 sizes and can be washed. Sizing guides available online.



Tanya's Hot Tip

Use a charm at the bottom of the pole to remind you it's in place. An important addition for fire safety!

BATHROOM HACKS

There's no need to overlook the most important room in the house when implementing your home energy hacks! There are energy savings to be made in the bathroom, in water, heat and electricity.

Insulated Baths

Whether insulating the tub DIY fashion, or purchasing a specialist thermally efficient bath, you can soak warmer for longer.

Shower Timers

Soap up while monitoring the minutes with a shower timer. Set it to 4 minutes or less for maximum water savings.

Toilet Hippos

Flush smart with a toilet Hippo, an inflatable device that reduces the amount of water you use with every flush.



CLIMBING UP THE WALL

Thermal Lining Paper

Thermal Lining Wallpaper, or insulating wallpaper is a lining paper comprised of a thick sheet of interwoven fibres, much thicker than regular wall paper and quite different in texture. Since around 35% of the heat from your home can be lost through walls, depending on the level of insulation, investing in thermal wallpaper can be a great addition to your home. While thermal wallpaper will not do the same job as other forms of wall insulation, it is particularly useful for walls that cannot be insulated by another method, or in addition to your existing insulation.

Insulating Paint

Thermally insulating paint has been around since the 1990s and is based on NASA technology which creates a tighter molecule structure which is said to actually stop heat transfer through walls and reflecting heat entirely back into the room. In theory this means that rooms heat up more quickly and the heat stays trapped in the room for longer. While studies on the effectiveness of thermally insulating paint are rare, anecdotal evidence is that it really does make a difference to the temperature of a room.

Using it in a similar fashion to thermal lining paper, on walls that are hard to treat with conventional insulation, or using in addition to conventional insulation, is a great way to get all of the benefits of this new technology.



AWESOME ADDITIONS

There are an array of excellent eco friendly products for every aspect of your home. Here are just a few of them.

Radiator Heat Reflectors

Reflects up to 96% of radiator heat

Radiator Fans

Pushes warm air back into the room

Radiator Additives

Conducts heat while breaking down debris

Thermostatic Radiator Control Valves

Easy to operate temperature control

Insulating Blinds

Retain heat through your windows

Tadpole

A robust and retro-fitting energy saving device designed to remove Oxygen. without corrosion, your radiators last longer



SUPER SAVINGS CHECKLIST

Check these simple changes off and see how much money you could save.



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- ☐ **Switch off standby** - You can save around £30 a year just by remembering to turn your appliances off standby mode.
- ☐ **Careful in your kitchen** - You can save around £30 a year from your energy bill just by using your kitchen appliances more carefully:
 - Use a bowl to wash up rather than a running tap and save £25 a year in energy bills.
 - Only fill the kettle with the amount of water that you need and save around £7 a year.
 - Cutback your washing machine use by just one cycle per week and save £5 a year on energy.
- ☐ **Get a water efficient shower head** - A water efficient shower head could save a four person household as much as £75 a year on gas for water heating.
- ☐ **Spend less time in the shower** - Spending one minute less in the shower each day will save a four-person family an £80 a year.
- ☐ **Take control of your heating** - More than half the money spent on fuel bills goes towards providing heating and hot water. Installing a room thermostat, a programmer and thermostatic radiator valves and using these controls efficiently could save you around £75 a year. If you already have a full set of controls, turning down your room thermostat by just one degree can save around £80 a year.
- ☐ **Get savvy with smart controls** - Smart heating controls are the latest innovation to help you control your heating and understand your energy use. They allow you to control your heating remotely via a mobile app, meaning that you can manage the temperature of your home from wherever you are, at whatever time of day. Easily save £150
- ☐ **Switch to LEDs** - If the average household replaced all of their bulbs with LEDs, it would cost about £100 and save about £35 a year on bills.
- ☐ **Turn off lights** - This will save you around £14 on your annual energy bills.
- ☐ **Radiator reflectors** - steel radiator reduces heat loss through walls by up to 60% in some cases, on average 35%.
- ☐ **Solar gain and loss** – keep windows free of items and close your curtains and blinds one hour before it gets dark

ENERGY SUPERHEROS



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There are many products on the market that can help you save energy and money. While we can't endorse any particular products or sellers (and can't guarantee the results manufacturers claim), we have put together a list of product ideas that could get you on your way to a warmer and more energy efficient home.

Insulating paint additive – A breathable (open cell) additive is recommended – this is one of several on the market – [here](#)

Insulating wallpaper – Thicker than your typical wallpaper, fire retardant, must use their own adhesive, can be painted direct over and importantly breathable. We have a roll of this in our warehouse so if you ever need a sample just request, we will post out. Several on the market with different thicknesses and results - [here](#)

Radiator reflectors – discrete, easy installed and really work - [here](#)

Radiator fan – several on the market, this one is the best value, does however omit a faint hum, TV drowns it out – [here](#)

Radiator liquid – Endotherm Energy Saving Central Heating Additive. It's a unique, energy saving central heating additive independently proven to save 15% on heating bills – [here](#)

Decorators Caulk – you get normal and quick drying tubes, white, magnolia and brown – [here](#)

Wood floor – 1. rubber inlay, however if floor moves this can pop out - [here](#) 2. Stop Gap is this V shaped solution and my favourite - [here](#)

Chimney Pillow / sheep / sock – various version of this.

Sheep – [here](#) - love this because it's made of wool. You need to use sizing guide.

Sock - [here](#) - This chimney sock is one of the first on the market, its plastic.

Pillow – [here](#) – this is a cheap and cheerful, one size fits all.



- Insulating underlay** – 1. Cloud Nine Cumulus manufactures a 3.2 tog underlay – [here](#)
2. Timbermate XL for under wood floors or underfloor heating, also good for noise reduction – [here](#)

Heating controls – Hive – [here](#) - this one is easy to use and you control completely at home or remotely. Nest – [here](#) - this has artificial intelligence, excellent for teaching children or if you're looking for more automation.

Thermostatic Radiator Controls - *Thermostatic radiator valves* (TRVs) *Thermostatic radiator valves* do not control the boiler; they reduce the flow of water through the *radiator* which they are fitted to when the temperature goes above a certain setting. Several on the market, one of the most popular is – [here](#)

Dehumidifier – Many on the market – look for low energy, low noise and adjustable settings and some have pollution catcher too. When we last looked this was good all round value for a large home - [here](#)

Boiler Tadpole - A robust and retro-fitting energy saving device designed to remove Oxygen. Without corrosion your boiler and radiators last longer - [here](#)

Heat Powered Stove Fan– A great fan option for your wood burning stove - [here](#)

Chop-Cloc– An innovative measure that works with your thermostat to reduce heating costs– [here](#)



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glaze&save

magnetic secondary & draft proofing systems

VIBES
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