




# THE ULTIMATE GUIDE TO RETROFITTING SOLAR & HEAT PUMPS IN YOUR FOREVER HOME

**Your Home is Perfect – Now Make it  
Powerful**



Leah Robson  
Managing Director  
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You've spent years making your home truly yours—carefully choosing the right fixtures, decorating every space to reflect your style, and creating a place that feels like home. But with rising energy costs and a growing need for sustainability, you might be wondering:

*Is it too late to retrofit my home with solar panels or a heat pump without disrupting everything?*

Good news: It's never too late, and it doesn't have to ruin your home's aesthetic or require a major overhaul. In fact, retrofitting green energy solutions is one of the best investments you can make to protect your finances, increase your home's value, and make your forever home more comfortable—without undoing everything you love about it.

## Why Retrofitting Solar & Heat Pumps makes sense in an established home

If you've already settled into your home, installing a heat pump or solar panels might seem like an unnecessary disruption. However, with an experienced installer, these solutions can be installed with maximum long-term benefits.



### Preserve Your Home's Aesthetic While Lowering Bills

Newer, quieter, matt black heat pumps, designer radiators and sleek solar panel designs blend seamlessly with existing architecture. There is no need for bulky, unattractive installations.



### Work Around What You Already Have

Whether it's a heritage home, a period property, or a home filled with years of personal touches, modern energy systems can be adapted to fit your space rather than the other way around.



### Reduce Your Dependence on the Grid

Energy prices have been rising unpredictably, and future increases are expected. Solar panels with battery storage and a heat pump help you lock in lower energy costs for life.



### A Smarter Investment Than Cosmetic Updates

A new kitchen or bathroom is great, but a well-insulated, energy-efficient home saves you money every month and increases its resale value if you ever decide to move.



### It's More Affordable Than You Think

With government incentives (like the Boiler Upgrade Scheme offering £7,500 for heat pumps) and green mortgage benefits, you can reduce the upfront cost significantly.



## What's Retrofitting?

Retrofitting is the process of upgrading or modifying existing buildings, infrastructure, or systems with new technologies or materials to improve efficiency, performance, or sustainability. In the context of green energy, retrofitting often involves integrating renewable energy solutions such as solar panels, heat pumps, or improved insulation into older homes to enhance energy efficiency, reduce carbon emissions, and lower energy costs. We like to call it **Green Retrofitting!**

## What people often worry about...

- Will it disrupt my home?** Solar panels are installed within a week, and the majority of the work is outside. Even home batteries are normally installed outdoors. We take great care to ensure that your heat pump installation is as painless as possible. An installation takes 1-2 weeks and we make sure you are never without hot water.
- Will it ruin my home's look?** Modern low-profile solar panels and discreet heat pump positioning mean your home's charm remains intact.
- Isn't it too expensive?** Government incentives, green mortgages, and long-term savings make retrofitting one of the smartest financial moves.
- Will it work for older homes?** Yes! Heat pumps can work with radiators and poor insulation, and solar panels work even in cloudy UK weather.
- Will it be outdated soon?** Solar panels last 25-30 years, and heat pumps 20+ years—a long-term investment that pays back.

## How much can you save?

- Solar Panels From £250 per year on electricity bills.
- Heat Pump For every 1kWh of electricity used they generate 3 to 4 times as much heat.
- Battery Storage Stores excess energy, reducing reliance on the grid.
- EV Charger Charge your car with free solar energy instead of expensive electricity.

“  
*Over time, these savings add up to thousands of pounds—all while increasing your home's value and making it more sustainable.*  
 ”



# How to retrofit without ruining your home's look and feel

One of the biggest hesitations homeowners have is the fear that installing green energy solutions will mean tearing up their home, exposing wires, or adding unsightly equipment. That doesn't have to be the case.

01

## Low-Impact Solar installation

- **Roof-integrated panels** – Unlike older bulky panels, today's solar technology includes low-profile, sleek panels that integrate seamlessly with your roof. If you have a heritage or conservation-area home, there are options to install solar panels that look like roof tiles.
- **Smart positioning** – With careful planning from an experienced installer, panels can be placed strategically to be less visible from the street while still maximising energy efficiency. Even flat roofs can be used with systems that are held onto the roof with ballast. If your roof isn't ideal, shed or garage roofs can be used.
- **Battery storage for nighttime energy use** – If you want to reduce dependence on the grid even further, adding a compact solar battery allows you to store excess energy without the need for visible external installations.

02

## Upgrading to a heat pump easily

Many people assume heat pumps require extensive modifications to their home's heating system. Not true. If you already have radiators, they can be adapted or upgraded.

- **Keep your existing pipework** – Modern heat pumps work with larger radiators on existing pipework, or even keep most of your current radiators with just minor adjustments. No need to rip out your existing system.
- **Smart, discreet installation** – Heat pumps can be positioned in less noticeable areas, like the side or back of your home, and newer models are quieter and more attractive looking than ever before.
- **Underfloor heating? Already insulated? Great!** – If you've already made comfort upgrades in your home, a heat pump can enhance what you already have, making your home even more energy-efficient. But you don't have to have underfloor heating or great insulation to have a heat pump.

## Fabric First is not always right

For years, the industry recommended an approach called “fabric first”—insulating homes and improving energy efficiency before considering renewable technology. However, the latest research shows that starting with renewables first—such as a heat pump and solar panels—has a far greater and immediate impact on energy savings and carbon reduction.

The best home energy systems follow a four-stage journey, evolving from basic solar panels to a fully integrated, self-sufficient home:

- 01 **Solar panels generate free electricity.**
- 02 **A home battery stores surplus energy for use when needed.**
- 03 **Smart controls manage when and how you use energy to reduce costs.**
- 04 **A heat pump provides energy-efficient heating and cooling.**

This joined-up approach is more efficient and cost-effective than tackling energy upgrades in isolation.

## Should You Install Solar Panels or a Heat Pump First?

If you're unsure where to begin, here's a simple decision-making framework:

### **Want to reduce your bills immediately?**

→ Install solar panels and a home battery first. This lets you generate and store your own electricity, cutting costs straight away.

### **Want to reduce carbon emissions immediately?**

→ Install a heat pump first. It drastically cuts CO<sub>2</sub> emissions and ensures your home is powered by clean, efficient energy.

### **Want to maximise both savings and sustainability?**

→ Install everything together. This is the fastest way to lower costs, reduce reliance on the grid, and make the most of smart tariffs.

To discover more about what to start with first [watch our free webinar here](#).

# What gives you the best outcomes for your investment?

The easiest answer is to say that the best way to invest in renewables and save money is with a solar PV system. Spending £10-15k on solar and battery gives you the best bang for your buck.

And we could leave it at that, but we wouldn't be telling you the whole story. The fact is that there are lots of different ways to get value depending on what's important to you.

We've created this table to help you unlock the value and understand what will work for you. Please note, we've been conservative with our annual saving and CO2 reduction. And depending on energy rates, you can save even more when you're able to sell back to the grid at a profit. Right now the rates are in your favour, but we don't know how long that will last.

Outcomes	Installation	Sizes	Annual Savings	Annual CO2 Reduction	Cost after grants
A low-cost entry solution bringing immediate savings that you can expand later	Small Solar	3.6kWp	£250	27%	£7,500
Best for CO2 reduction	Average Heatpump	7kW	£300	63%	£10,000
Bills are halved	Small solar Small battery	3.5kWp 5kWhr	£850	27%	£10,000
Best for money saving	Large solar Medium battery	5kWp 10kWhr	£1,250	37%	£15,000
Best for CO2 reduction and annual savings without solar	Average heat pump Medium battery	7kW 10kWhr	£530	63%	£15,000
Going completely green + great annual savings	Average heat pump Large solar Medium battery	7kW 5kWp 10kWhrs	£1,500	100%	£25,000

*Based on a home with a 7kW heat loss, 2,700kWhrs electricity per year, 11,500kWhr gas per year, heat pump COP of 4.25, overall running cost of £1,700 annually, good south facing roof. All avoiding Octopus Go tariffs as only available to owners of electric vehicles.*

## Why this is a smart use of an inheritance

If you've recently received an inheritance or a lump sum, deciding how to invest it wisely can be challenging. While some may consider paying off a mortgage or even taking a trip, installing solar panels and a heat pump is one of the most financially sound decisions you can make.

**Immediate Return on Investment** – Start saving on energy bills right away instead of letting your inheritance sit in a low-interest account.

**Adds Value to Your Home** – Properties with renewable energy solutions sell for more and are more desirable.

**Energy Security for the Future** – Lock in today's energy rates and protect yourself from rising prices.

**Leave a Legacy** – Investing in green energy helps create a sustainable future for the next generation.

**Make your home powerful** - with the right battery, you can ensure your home is never without power, even if the increasing storms or operating challenges put uptimes at risk.

**Tax Benefits & Incentives** – Use government grants to maximise your investment while reducing upfront costs. Current installations are also VAT free.

*"If you're a retiring professional who's fairly well-off, which you will be if you live in this kind of house, and you get a big lump sum, do you spend it on a round-the-world cruise or do you spend it on a heat pump?  
To me there's only one answer – get a heat pump."*

**Mr Smithson**

## How you can get started right away

Even if you're not planning major home upgrades now, you can make small decisions today that will save you thousands later. Here's how:

- **Install an inverter with extra connections** – This allows for additional solar panels in the future without costly replacements.
- **Plan a location for extra battery storage** – Even if you don't add a battery now, having the space ready means adding one later is easy.
- **Choose a heat pump with expansion capability** – If you extend your home later, your heat pump will still work efficiently.
- **Plan for an EV charger** – Even if you don't have an electric car yet, installing the wiring today makes future upgrades simple.

# How the process works

01

## Home Energy Assessment

*Get a professional evaluation of your home's suitability.*

A Solar PV & Battery survey should typically take around 1 ½ hours and include measuring the roof (we prefer using a laser measuring tool where appropriate) and carrying out a visual inspection from the ground, in the loft, and even using a drone to check that the roof is sound to confirm the load of the panels will not damage the roof.

Heat pump surveys start at around 2 hours but can require a few days to complete. Good installers should be talking to you about how they generate your Heat Loss Calculation (HLC), the industry standard report. The process is to measure all the walls, windows, floors, etc., of your building and combine this with information about the fabric of your home in order to accurately calculate the size of the air source heat pump that would heat your home.

We prefer to perform a Matterport scan, which collects visual data and turns it into a computer model bespoke to your home. This allows us to forecast your heat and energy demands. We start by scanning your home's interior using 3D imaging technology to map dimensions and identify radiators accurately. We then combine this model with historical satellite weather data and energy usage patterns to plan your renewable energy project.

In the winter months, we also leave data loggers at your home for 3 weeks to give us a more accurate reading of your heat loss. This allows us to accurately size the heat pump, which can save money by reducing the size of the heat pump and number of radiators you need.

Depending on the home, you might want to add an air pressure test to measure the speed of air changes in your building per hour. This allows you to see where you have draughts that are making your building inefficient and uncomfortable. Our air pressure test will provide you an Air Permeability Certificate registered with Elmhurst Energy.

02

## System Design & Quotation

*Don't settle for a one size fits all solution.*

As the saying goes, your home is your castle. Getting the right solution is really important to ensure you've got a system that will last and meet your needs. A good supplier will discuss different options and provide you with alternatives to help ensure you're planning for the future as well as taking care while retrofitting your home.

03

## Hassle-Free Installation

Most systems take just one to two weeks to install. Make sure your chosen provider commits to minimising disruption and clearing up after themselves, while being considerate of your home and the things you value.



# Frequently Asked Questions

## ? Will I qualify for incentives?

✓ Most homeowners are eligible for the £5,000 Boiler Upgrade Scheme for heat pumps and can earn money back through the Smart Export Guarantee for solar energy. The Energy Company Obligation (ECO4) is also a scheme to help low-income households install energy-efficient systems. Many installers will offer to help you qualify for free funds only they can help with. Be careful. This is often a scam to get your details to offer you their services.

## ? Does solar really work in the UK on cloudy days?

✓ Absolutely. Solar panels still generate power even when it's overcast, making them effective year-round in the UK.

## ? Will my home be warm with a heat pump - I hate the cold?

✓ There is a misperception that homes with heat pumps don't leave your home warm. The truth is that heat pumps are designed to keep your homes at a constant and perfect temperature year round.

## ? Do I need to upgrade my home's insulation before installing a heat pump?

✓ While heat pumps are efficient and work in all homes, they work best in well-insulated homes. If your home is poorly insulated, potentially upgrading loft, wall, and floor insulation first can improve efficiency and reduce running costs and a good installer should explain your options.

## ? Do I need a south-facing roof for solar panels to be effective?

✓ South-facing roofs are ideal, but east- and west-facing roofs still work well. Even north-facing panels can generate energy, though less efficiently. And we can even install great solutions on flat roofs. Battery storage can additionally maximise savings by storing energy for later use.

## ? Can I keep my gas boiler as a backup if I install a heat pump?

✓ Yes! Some homeowners opt for a hybrid system, where a heat pump handles most heating, and a boiler supports during very cold spells. However, all modern heat pumps can handle UK winters without backup, and we do have to warn you that keeping your boiler means you most likely won't qualify for the government grant.

## ? Will a heat pump work with my existing radiators?

✓ It depends. Some older radiators may need to be replaced with larger, more efficient ones to operate effectively at lower temperatures. A heat pump installer can advise on whether upgrades are needed.

## ? Do I need a lot of outdoor space for a heat pump?

✓ Air source heat pumps require a unit outside, about the size of an air conditioning unit. Ground source heat pumps need more space for underground pipes but are ideal for homes with large gardens.

## ? How much does it cost to retrofit solar panels and a heat pump?

✓ Costs vary depending on your home's size and requirements. On average:

- Solar panels: £7,500–£10,000, with battery storage adding £3,000–£8,000
- Air source heat pump: £10,000–£14,000, depending on system size and installation complexity
- Ground source heat pump: £18,000–£30,000, due to excavation work

# What's next? How do I get started?

You've built the perfect home. Now, let's make sure it's energy-efficient, cost-effective, and ready for the future.

Book a free no-obligation discovery call today and take the first step toward a smarter home. [Book here](#) or call us on 01784 530018.

## About Us

This guide was created by Your Energy Your Way, specialists in green energy solutions. We stand apart in an industry plagued by cookie-cutter solutions and false promises. For a decade, we've been a trusted partner to homeowners and businesses across Hampshire, Berkshire, Surrey, and West London, championing personalised solar and heat pump installations that work for your unique needs—not someone else's.

**Our team brings over 25 years working in technology and renewable energy.**

We were installing solar and heat pumps when the Big Six energy suppliers were still selling coal fired energy. We're nice, honest, reliable, and dependable industry experts. We genuinely care about this industry and its future, which means we make every job our priority, as you can see from our

**We are also a Community Interest Company (CIC).**

We are a social enterprise that uses its profits for the public good. Our goal is to be part of the future of the industry, one that is inclusive and supportive. To help deliver this we are proud to be running a trainee scheme which focuses on training new entrants into the sector, particularly women.

Check out our customer reviews [here](#).



*"The team at YEYW delivered us the full sustainable package of heat pump, solar panels and batteries. They provided an excellent service throughout and are highly recommended."*

*Dan Curran*

