

# UNDERSTANDING CENTRAL HEATING SYSTEMS

*How To Save Money & Stay Warm  
In The Winter*



HomeAdviceGuide.com

# **Understanding Central Heating Systems**

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## Central Heating Systems

There are a variety of central heating systems. Each uses specific boiler technology in various ways. Combination, condensing and systems boilers are the most common types of heating systems and can run on a variety of fuels.

- **Gas** – condensing boilers typically use a gas such as propane to heat water, which is then pumped through a network of pipes throughout the building. This type of system is ideal for underfloor heating and be used in very large buildings
- **Electric** – these systems tend to be more expensive as electric energy is automatically converted to heat and distributed using air duct networks. This system is best suited to homes or buildings where all rooms need to be constantly heated.
- **Hydronic** – hydronic systems are using steam or hot water; its circuit is through a loop system which is closed that is using water alternatively to heating or cooling. These systems are ideal for heating in the winter and cooling in the summer.

## Repairs and Maintenance

Any central heating system will only be energy efficient as long as it is well maintained. Most central heating installations come with maintenance plans to ensure that your boiler system is kept in perfect working condition all year round, even when not in use. The cost of central heating boiler maintenance is minimal compared to the cost of boiler repairs or even replacement due to lack of care. Boilers kept in good shape will provide years of energy efficient and money saving service.

## Fuel Prices

Home central heating systems can be cost effective but this largely depends on the type of fuel being used. Most modern boilers tend to use natural gas, one of the most energy efficient fuels for any boiler system, while others use oil, wood or even solid fuels such as coal. Certain boiler systems

operate best are certain fuels, which is why you should always consult the professionals before deciding on which boiler system and fuel source is best for you.

## **Domestic and Commercial Central Heating Services**

Our central heating professionals are specialised and able to take over both domestic and commercial central heating jobs. Whether you are interested in servicing or repairing the central heating of your home or of a rental property or social housing, our experts can handle with their experience all boilers and heating systems, diagnose the problems and provide highly effective solutions.

## **Central Heating Repair Costs**

Average central heating repair prices vary based on the extent of the problem and what steps must be taken to adequately repair the heating system. The type of system can affect the price of repairs along with the local cost of labour, parts and materials. When a central heating repair job is not feasible due to extensive problems with the system, the experts in our database can install a new boiler or central heating system for a reasonable price.

## What is the most cost effective way to heat a home

Home heating has advanced so much that there are many heating options to consider. To assist your heating system in functioning at its utmost efficiency one ought to consider using proper insulation, sealing any openings/leaks in the ceiling, on the floor or the walls that could allow cold air into the home from outside as well as other sealing options for doors and windows. Only once this has been completed can one look for a heating system such as Boilers, Solar Heating, Heat Pumps, Gas Heating, Wood Heating, Under Floor Heating or Renewable Heating Options.

There is a rising unease about the electrical price increases thus it would be best to look at heating options which will reduce the use of electricity. In the UK alone it is proven to be an endless battle fought by countless number of citizens. Providing sufficient heating to a home via the use of electrical heating has a high cost which is to rise every year thus we have listed some of the most cost-effective ways to achieve proper heating.

The cheapest heating system might not always be the best solution for your home because some heating systems require more maintenance than others and the fuel or oil consumption of these heating systems could be much more expensive to maintain in the end.

The decision now lies with you to decide whether your family will try to stay warm bundled closely together waiting for warmer weather to settle in or installing a new heating system that will ultimately save you a fortune!

### **BOILER HEATING SYSTEMS**

*Herewith a few handy tips before we get to the variety of heating systems!*

During winter time it is recommended to hang thicker curtains in front of windows thus aiding in the insulation of a home. Also be sure to open them during the day time, allowing heat to penetrate the home. One may also find that adding curtains to the inside of doors leading out will keep some of the cold air out.

Radiators and boilers are some of the most economical heating systems on the market to provide cost effective heat in your home. If you are using a radiator try to keep the area in front of it clear of any furnishings as this will take in the heat being given off by your radiator. There is also the option of adding aluminium foil which repels the heat from your radiator back into a room if it is placed behind the radiator to keep the heat from escaping through the wall.



## **Heating with a Boiler System**

This is one of the most used systems throughout the UK even though they do not last a life time and most should be replaced within ten years from installation. These heating systems provide homes with economical heating so the consumption of the world's natural resources are reduced dramatically. The good news though is that there are new boiler systems on the market which could prove to be **90%** more efficient than the one currently installed in your home. One could have a new boiler system fitted for approximately **£2,000** or less moreover this system is a true winner of long term heating. For some advice on tuning your boiler have a closer look [here](#).

Boiler systems can provide your home with central heating by installing radiators in all the rooms of your home. Radiators come in a wide range of shapes and sizes so you can properly heat from the smallest of rooms to the largest of dining areas at little extra effort to the boiler. Central heating is the best way of heating a house because it is an economical heating method that can be installed in any home at ease.

For more economical heating when using a boiler system, you should make your home draught proof and invest in double glazing windows that will keep the heat inside and the cold outside. It is important to have good ventilation in your home but try to keep the windows shut while your central heating system is on so your boiler won't run at full capacity the entire time.

## **Heating a home by means of fuel heating systems**

Herewith a list of some of the most common Fuel Heating Systems available which one could also consider for home heating options. There is a wide range of Fuel Heating Systems and as technology advances so does the heating options we have to our disposal. Heating a house is much easier than it used to be and homes require fewer modifications for newer heating systems to fit.

**Electric Heating System** – Using these heating options is not recommended as it will ultimately become extremely costly to handle even for a small home unless the use of Renewable Energy is at hand like Wind Power Generating System or a Solar/Sun Power Generating System is utilized. Despite the high energy consumption, electrical heating systems are still commonly used in homes.

**Oil Heating System** – This system for heating could also be a costly one in addition to being unsafe if you live near gas mains. There are however many homes throughout the UK that still use this system for heating although it is not known to be environmentally friendly and the price increase for oil is likely to cause a reduction in the use of such systems.

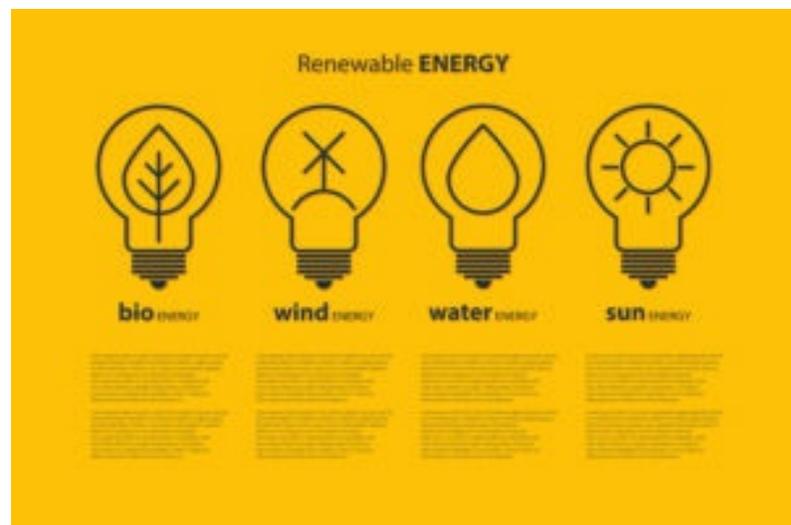
**Wood Heating System** – This option although not commonly used is environmentally friendly as well as providing a great cost saving way of generating heat for a home. Modern wood boilers/ furnaces and woodstoves has become efficient in heating homes with very little air pollution if installed correctly in addition trees are abundant thus fuel for this system is most likely to be cheap and easily accessible.

Gas and electrical heating systems are the most cost effective heating methods because the cost of oil is incredibly high due to oils scarcity. Wood heating systems are also costly in the long run because you require a lot of wood to keep your boiler warm, it pollutes the air and requires constant maintenance to feed the flames.

## **Substitute Heating System Options**

Herewith follows some more options for heating that could be used in a home. Some might be costly initially but will save you money in the long run whereas others could include grants (to apply for a grant contact your local council) but moreover the ecological impact is considerably less than the previous options. These mostly use Free Energy via the air, sun, water or even the ground to provide heat.

**Renewable Energy System** – According to studies done in 2011 it is predicted that within fifty years solar power will supply almost all of



the world's energy needs. There are a lot of boilers such as system boilers that already function on solar panels to provide effective heat in homes. Other natural resources will also contribute to the energy supply such as wind, waves and rain. The cost of effective heating when using a solar panel is much higher due to the increased price of these systems and the battery packs that is required for these systems to operate effectively. A reduction in costs is likely to be seen in the coming years making the use of Renewable Energy Systems easier for all.

**Heat Pump Systems** – These systems are quite cost-effective due to the use of wind or water for heat generation. They have a lifespan of approximately 25 years which makes it a great addition to any home. The bi-functionality only adds to the eco-friendly facet of heat pumps thus it can be used for heat during winter as well as air-conditioning during summer.

## **THERMAL HEATING SYSTEMS WITH SOLAR**

### **Underfloor heating**

There is a trend forming with home owners in the UK thru use of Solar Energy Systems which can only be attributed to the maintenance cost of such systems. These systems produce heating for a home plus hot water therefore the use of any other source for heating purposes has basically been eliminated. With a lifetime of twenty-five years in addition to the running costs which is a bare minimal these systems are quickly becoming the choice for many. The installation as well as design of such systems could also influence the effectiveness thus it is recommended to use skilled professionals for assistance.

### **Renewable Heat Incentives UK - RHI**

During 2012 the first stage of RHI was introduced to the Non-Domestic sector in UK to encourage Businesses as well as Communities to commit to using heat sources other than electric by providing financial incentives to those who do. As of April 2014 the Domestic sector of RHI has been introduced to the citizens of the UK. For more details contact the Department of Energy and Climate Change (DECC) in regards to provisions for Domestic RHI.

### **Under Floor Heating Systems**

Here we have another option for cost-effective heating of a home as this option proves to be highly effective in all homes but much more in smaller homes. As we all know warm air rises thus if the flooring of an area is heated the area itself will become warmer consequently providing heat to the entire room including furniture, objects and people. It is known to be the most stable form of heating a home from the floor to the ceiling.

## **Heating System Conclusions**

Depending on the area within the UK your home is as well as the money you have available for heating systems will ultimately determines the Heating System installed. Gas and electrical boilers are the most commonly used heating systems used in the UK. They are preferred above other heating systems because the modern designs are compact and sleek in design. They fit into just about any home and have huge cost effective heating benefits to homes.

Between gas and electrical components, gas boilers are the cheapest of heating systems because they have lower fuel consumption costs. Gas boilers do however require a lot more maintenance to ensure the boiler is functioning well and to ensure the gas canisters don't run empty.

The main advantage of electrical boilers is the fact that it requires hardly any maintenance for effective heating and can provide your home with heat on a more stable level.

## Average Cost of Central Heating Systems

Having a safe and efficient central heating system is an important part of your property, so if you need to replace or install a new system, find out the cost of a new central heating system here.

Central heating is less of a luxury and more of a fundamental necessity to UK home – and we have Mother Nature to thank for that one! The idea of going even a month without access to on-demand heating is pretty grim to say the least, but central heating systems are neither time nor bullet-proof.

Poor central heating means not only a cold, noisy and generally uncomfortable home, it could also be burning money like you wouldn't believe. Upgrading to a new 21st century standard can make the most incredible difference, though it's understandably crucial to establish what kinds of costs you're looking at first because how much central heating costs depends on a great many aspects such as boiler type, installations, fuels, flues, radiators, cylinders and much more.

The first question on everyone's minds when they consider central heating is; how much is central heating? Exactly how much you can expect to pay will of course be determined by the size, complexity and type of central heating installation you go for. Variables like the size of the home, the number of rooms in which to place radiators and other extras like under-floor heating will all make their respective marks on the overall costs. The cost of installing central heating depends many factors such as the remodeling requirements of your home so it will be suitable for central heating has a great effect on how much central heating is, the time it takes and how difficult the installation of added items that you will need for the system to function properly.

Generally speaking, you'll be looking at an installation bill of between **£350** and **£1,000**, which comes on top of the costs of the parts.

### **GAS OR ELECTRIC CENTRAL HEATING?**

Where available, gas central heating is by far the UK's most popular and highly-recommended choice for central heating. The reason is that when considering how much it is to install central heating and how much the running costs are for gas and electric units are gas central heating almost always works out cheaper than electric.

Other options include LPG and Oil central heating systems, though in both cases are again less efficient financially speaking than gas. Gas units are also the most reliable in remote destinations because residents can enjoy warm water and homes even when there is no electricity available.

**In terms of annual running costs, fuel bill will of course vary massively with usage and property size, though for the average UK home come out around:**

- Electric – £1,700
- Gas – £770
- Oil – £1,100
- Gas LPG – £1,300

A tailored tariff from an electricity supplier could of course bring the seemingly excessive costs of electric central heating down a degree, though gas remains the most cost-effective by far.

How much it is to install gas central heating depends greatly on the size of the unit, the complexity of your home, the time it takes to install the units and your personal preference regarding where and how the installation should take place.

Installing a new gas central heating system could be far more cost effective then using an old system because it will save you a lot of money on repairs in the long run and many companies will offer installation discounts if you purchase new units.

**Looking for central heating professionals? We can help!**

## **A FULL CENTRAL HEATING SYSTEM REPLACEMENT COST?**

If an outright refit of the whole job lot is called for, central heating cost to install will again be determined by both equipment required and the installation labor costs. There is however certain independent guidelines that can help give a rough idea, which includes the following:

- New Boiler Supplied and Fitted – **£1,600 to £2,000**
- New Radiator Supplied and Fitted – **£180** Each
- New Boiler Pump Fitted – **£150**
- Power Flush on Existing System – **£375**
- Upgrade from Oil to Gas Central Heating – **£2,500**

These are of course rough estimates and will vary in accordance with the job and the provider and the cost to fit central heating is mostly determined by your own preferences of brand, size and home renovation requirements so the units will have a good appearance in your home.

## **WHAT IS THE COST OF NEW CENTRAL HEATING?**

So, how much does **new central heating** really cost? Well of course the price will depend on the size of your property and whether you already have central heating installed. The total cost is made up of the price of the parts needed to replace or install and the labour it will take for installation.

According to WhatPrice:

- **Open vent central heating** on average will cost **£2800 to £3000**
- **Sealed central heating** will cost **£2900 to £3200**

Added to this will be the price for fitting that can vary between **£500** and **£1200**.

## **Gas central heating installation costs**

Gas is the most popular fuel used to heat in the UK, whether from mains or from LPG in cylinders. The cost of course will depend on the size of your property and the number of radiators but an average price from WhatPrice is:

- A **single story** building with 3 radiators is around **£2000**
- A **two story** building with six radiators is around **£2800**

## **Price of central heating radiators**

The cost of radiators will depend on the size and the number you need. At HomeBase radiators vary in price such as:

- **Delta T50** single panel radiator 600 x 500 x 47 is **£25.99**
- **Delta T50** single panel radiator 600 x 800 x 47 is **£36.99**
- **Colonna 2 column** radiator 602 x 609 is **£139.99**

Plumbworld UK have radiators from £23.94 to designer panels from **£79.78**

## **Price of central heating pumps**

The central heating pump is a vital part of the system and it will need to be replaced eventually. Of course the price will depend on the size of pump and some prices are listed below from Plumbworld and HomeBase UK. Changing a pump can cost between **£90** and **£150** in labour according to WhatPrice.

- **Grundfos Alpha 2L** is **£109.88** from Plumbworld
- **Grundfos UPS2** full pump is **£117.40** from Plumbworld

- Other brand pumps start at around £40

## Central heating running costs

The **cost of heating buildings** will depend on the fuel that you use to run it. The following prices are based on a three bedroom semi-detached property that is well insulated:

<b>Electricity</b>	£1850
<b>Gas</b>	£800
<b>Oil</b>	£1250
<b>LPG</b>	£1450 +
Price includes heating and hot water supply	

## Electric central heating running costs

**Electric central heating** costs depend on the tariff charged and the electricity company you are with. The most economical tariff is a 7 or 10 that use storage heaters that come on at night for cheaper prices. Electric central heating is cheaper to install as there are no pipes and flues to worry about and there is less servicing needed.

- Electric central heating from British Gas average costs per year around **£1100**
- Electric central heating from Npower average costs per year around **£1050**
- Electric central heating from EDF average costs per year around **£1150**

## SYSTEM COMPONENTS AND DESIGN

### Central Heating

Central heating solutions facilitate to have a central unit that generates heat which can be used for various other sub-systems which would be in need of heating solutions. There are widespread applications of central heating systems and it is in huge demand, which enables you to enjoy warm and cozy temperatures at your place during chilly winters. Read on to know more about the usage of central heating in different areas and what it costs to install central heating and all the components that you will require for an effective heating system.

### Boilers

A central heating boiler supplies hot water throughout, never having you to wait for the same. A

single boiler can have several outlets which can supply hot water to kitchens, bathrooms etc. There



Combination Boiler

are various types of boilers available in the market such as combination boiler, open vent boiler and system boiler. By having this installed, one can enjoy hot water at all times from a single centralized heating boiler.

The size and type of your boiler has the greatest effect on the cost of new central heating systems because it is by far the biggest component that is required for effective central heating.

## **Fuels**

There are various types of fuels which can be made use of for central heating facilities. Natural gas, electricity, oil, charcoal and renewable fuel sources can be used as fuels for central heating solutions, depending upon the requirements of the user.

These fuels could also have an effect on the cost of central heating installation because extras such as gas canisters or charcoal containers should also be installed at your home, especially if you want your home to have a neat and tidy appearance.

## **Flues**

Flues are chimneys that serve as a vent for the fumes to move out which produced during the operation of central heating boilers. It is essential to have a good quality and efficient flue in place for the boiler, as the fumes might prove to be hazardous, if not vented out properly, by causing overheating and explosion of the boiler. The flues may be concealed or visible openly, based on the installation approach followed. However, regular servicing and maintenance of the flue has to be carried enable the smooth functioning of the boiler; thereby avoiding any untoward incidents. The flue you decide upon will greatly affect how much it is to fit central heating, especially if you want a concealed flue that is built into the walls.

## **Hot Water Cylinders**

Hot water cylinders are used to store the water heated from a boiler and it stays insulated; thereby keeping the water hot for several days. Also, water present in the hot water cylinder can also be heated by subjecting it to different heat sources. There are two types of hot water cylinders available: Vented hot water cylinders; which are connected using a vent pipe to a cold water tank

and unvented hot water cylinders; which are pressurized to maintain water pressure which can be used to supply hot water at a high pressure. The size of hot water cylinders vary for different boilers and increasing the size of your hot water cylinder will result in an increased fee of installing central heating but might be worth the extra amount if your household requires a lot of hot water or heating.

## **Radiators**

Radiators are useful in central heating systems as they provide flexible heating solutions; i.e. they heat up quickly and cool down quickly too. The advantages of using radiators are tremendous, as they are healthy, responsive and controllable as per the requirements of the user, which ends up saving time, owing to their heat dissipating capabilities. They are also safe to use as their surfaces remain warm, without causing any damage to things that are in contact with it or are in the close proximity. How much a new central heating system and effective radiators costs are nothing compared to how much you will save on time efficiency and medical bills if you don't have a central heating system.

## **CAN I GET FINANCIAL HELP?**

If you want to know how much to get to install central heating then you will have to discuss the matter with the suppliers so they will understand your unique needs and can provide you with an effective quote. The UK's central heating grants initiative has now been replaced by the 'Affordable Warmth' program though the principles remain largely the same. Grants are frequently awarded to those who aren't able to afford an essential upgrade to an old, inefficient or in any way dangerous central heating system – full guidelines and the application process can be found at [affordablewarmthgrants.co.uk](http://affordablewarmthgrants.co.uk). You will also receive guidelines as to which installing central heating costs are to be claimed and which you will be liable for.

## Oil Central Heating Systems Cost

You can either place a tank of heating oil on the ground, or you can put it underground. The choice lies with you!

### HEATING SYSTEMS BASED ON OIL

- It seems like every household in the UK is connected to gas lines, however, if you observe closely, you will find that almost 4 million houses do not have gas lines.
- In some rural regions of the UK, especially where gas grids are out of reach, heating oil seems to be a popular option. Generally, oil-fired boiler is used to make water hot, and through radiators, central heating takes place. Moreover, supply of hot water through taps is done as well.
- Oil is different from gas in the sense that you have to either buy or rent oil, whereas, you can simply have a pipe connection of gas!
- You can get heat-only variety as well as combination condensing oil-fired variety of boilers. In case of oil-fired combination types, water is normally kept internally for supplying through taps, which is not the case with gas central heating boilers where water gets heated instantly.
- Yearly expense for heating water and house (excluding any charges related to installation)
- On an average, you will have to pay around £1,355 per year
- The extent of emission of carbon in a typical year
- Expect around 4 or 5 tonnes of carbon to be emitted
- Whereas the above estimates do not consider real-life fuel bills, the assumptions are pretty accurate for most 3 bedroom houses.

### ADVANTAGES OF USING OIL CENTRAL HEATING BOILER

As oil as a fuel tends to be truly efficient, the return you get on your money is quite satisfactory. Moreover, some modern boilers can save as much as 90% energy. Additionally, when you go for replacement of your old boiler for some other new efficient model, the process is very hassle-free.

## **DISADVANTAGES OF USING OIL CENTRAL HEATING BOILER**

Similar to electricity and gas costs, the prices related to oil consumption are increasing too. The UK is required to compete globally in this regard, and it is expected that the rising trend will continue.

Since the supply of oil is through roads, it is very likely that you may have your oil finished in between two supplies. There is, in case you require a solution to this problem, a modern technology which allows your tank to automatically notify the oil supplier as soon as the amount of oil tends to get low.

Installation of oil central system tends to be very costly if you have never had one before. Besides, the tank will look a bit ugly if you do not keep it underground.

Both your oil tank and boiler will attract yearly servicing sessions if you want continued efficiency and reliability.

Condensing oil-fire type of boilers are mostly floor-standing models, and therefore, if you try to locate a piece that can actually be wall-mounted, it will be hard! Also, since any acidic condensate liquid must get removed, plumbing will be essential too.

Oil central heating boilers have the habit of keeping water in check to ensure operating hotness of domestic water. As it implies that the rate of flow of hot water is quite low, you will find that the hotness of water decreases with more water use.

Since oil is essentially a type of fossil fuel, the rate of emission of carbon dioxide is high.

## **ALTERNATIVE OPTIONS OF HEATING**

Since the cost of using oil-based heating is high, you can take a look at renewable heating options too. For instance, heat pumps and solar panels work wonders for some people. In addition, the Renewable Heat Incentive scheme aims to provide incentives to people who produce renewable heat on their own.

## Gas Central Heating Systems

Mains gas central heating system is the most seen option in the UK. The system is kind of like a 'wet-system', and that basically implies that water is heated by a certain gas-fired boiler in order to apply central heating using radiators, and in addition, through house taps, hot water is supplied.

Your house may not be connected to a gas grid, in which case, you can use electricity or oil heating. You can go for petroleum gas or LPG option too. The way in which such heating systems work is pretty identical to the mechanism of gas systems. Note that you will be required to rent or buy oil or LPG, which are normally kept in tanks and commuted by roads.

Yearly fuel expenses for heating water and house (excluding installation charges)

If you use condensing boiler, expect to pay around £770

In case you have a non-condensing boiler that is old, you will most likely spend about £947

The above estimations are not based on real fuel bills. Basically, the cost of electricity and the efficiency of heaters are taken into account. The basis of the information revolves around a hypothetical 3 bedroom house which is semi-detached and very nicely insulated with loft insulation nearing 270mm, thermostatic radiator valves, insulated main pipe work, and well-insulated cavity walls.

### ADVANTAGES OF USING GAS CENTRAL HEATING

The best thing about using gas is the truly great efficiency you get. Although standard boilers suck with hot flue gases, some modern boilers that make use of such variety are as much as 90% more efficient, or even higher.

The concern of having to store the fuel is non-existent, since gas reaches your house directly through pipelines.

Besides, if you want to replace your old gas boiler for a modern one, you just need to follow a standard process which is quite simple.

As already mentioned, gas is truly very popular heating option throughout the UK, and therefore, if you need a plumber for some reason related to servicing or break down, you can find one easily

enough. Note that the government needs a person to be on the Gas Safe Register to execute any kind of boiler-related work.

## **DISADVANTAGES OF USING GAS CENTRAL HEATING**

The fact of the matter is that the costs of gas are increasing consistently, and since the UK cannot provide enough gas on its own and has to compete globally to meet the demands, the scenario in future does not seem too promising.

Whether you need a new gas connection or want to install gas central heating in your house, the involved costs are almost always higher than costs involved in other options.

In order to ensure that your gas boiler lasts as long as it should and provides good efficiency, you need to service it at least once per year.

Gas, being a fossil fuel, is not really environment-friendly as it cannot be termed as a clean source due to high carbon dioxide emission involved.

## Electrical Central Heating Systems

Interestingly, the cheapest way of heating your house using electric central heating system is by using a system that makes use of night storage heaters. Such heaters utilize electricity provided at inexpensive night rate in order to heat certain bricks that can trap heat. The bricks, in return, heat up the house with the help of the heat retained!

Night storage variety of heaters release heat in a slow way, keeping a house warm for the entire day! Using immersion heater, you can make use of cheap electricity for heating water too!



### What is Economy 7 or Economy 10 electricity?

In case you go for a night storage heater, you will get electricity at cheaper rate during the night. Such kind of cheap electricity tariff is normally called Economy 7 electricity because you get 7 hours of cheap electricity during the night. There is another tariff known as Economy 10, which provides 3 extra hours of low-cost electricity, mostly during the afternoon.

If you want, you can use electric radiators too, which require normal electricity charges. But since the day cost of electricity is pretty high, you may have to spend a lot running such radiators. You should buy one only if your house has very nice insulation, and there is no need for regular radiator use.

**Annual expense on fuel for water heating needs and electric heating needs (installation not included)**

- The maximum fuel cost is estimated to be **£1,700**
- Carbon emitted throughout a year on average

- Yearly emission figure comes around 6 tonnes

The assumption for the above estimation is that a typical house contains 3 bedrooms, is semi-detached, and has very good insulation with loft insulation of 270mm, well-insulated pipe job, and insulated cavity walls. The average efficiency of electric heating systems, and with that, the ongoing electricity cost is taken into account too. Note that the estimations are not based on real fuel bills.

### **Advantages of using central electric heating**

- As electric night storage heaters do not need flue or pipe-work, the cost of installation is normally much lower than that of gas central system.
- Such heating systems, containing almost no major moving parts, do not require much maintenance, and yearly servicing is not essential either
- Almost all households in the UK have electricity, which is not the case with gas

### **Disadvantages of using central electric heating**

The cost of electricity is higher than that of gas per unit. Since both the cost of electricity and gas are going upward, it is unlikely that the trend will change in future. Besides, majority of UK electricity production is done using gas-fired stations of power, so in case gas prices increase, electricity prices will most probably increase too.

With tariffs such as Economy 10 or Economy 7, the day expense of electricity tends to be higher as compared to normal day electricity rate. Therefore, although you will save your money during the night when running your night appliances, you will actually spend more money during the day!

With night storage heaters, you cannot get instant heat! You will surely get heat so long as those bricks are warm, but in case you didn't use the system for a while, it will take almost a day to heat your house after you turn it on. A few modern models come with instant heating option too though.

Some heaters are equipped with charge control that adjusts heating according to the room temperature automatically. But if you have a model that cannot do so, you will have to make adjustments manually with changing weather.

## LPG Central Heating Systems

It may not seem that way with so many houses having gas heating systems, but nearly 3.6m households all around the UK have no relation with gas lines.

In those locations and houses where gas is not available, many utilize the power of LPG or liquefied petroleum gas. The basic system is a ‘wet’ system, with LPG-fired boiler heating the water for central heating requirements with the help of radiators, and supplying hot water through taps for domestic needs.

The basic distinction when it comes to gas and LPG is that you may need to purchase or rent LPG, as it is stored in tanks and is supplied by different suppliers. Note that a few boilers targeted to gas are actually capable of using LPG.

Yearly expenditure related to fuel for water and house heating purposes (with the exclusion of installation charges)

- Expect to pay around £1,300
- The rate of carbon emission on an average year
- The average emission tends to near 3.6 tonnes yearly

Although the above figures are not reflective of actual oil bills, you may take assurance in the fact that efficiency of heating systems and average costs of LPG were strict determinants. Typically, the data takes into consideration a house having 3 bedrooms which is semi-detached. Other than that, superior insulation is assumed too.

### Upsides of using LPG central heating

The efficiency of LPG is perhaps one of the biggest driving forces behind its popularity. As latest models of boilers are able to save as high as 90% of fuel at times, the choice of LPG seems pretty reasonable.

As far as replacement of an old model with a new one is concerned, you can have that done with minimal hassle.

Whenever you need a plumber, you are going to get one without much effort. The Gas Safe

Register website is a good place to go, since the law insists that anyone related to plumbing or repairing of boilers must be on the Gas Safe Register.

## **Downsides of using LPG central heating**

Like many other fuel sources, the cost of LPG is going to keep rising with time. So this factor may be a hindrance in the future.

Sometimes you may not have LPG anymore when you wait for the next delivery, as LPG delivery is based on road transportation. But since modern technology automatically notifies the supplier about unavailability of the fuel, you may be saved from facing this issue!

LPG installation charges are pretty high, especially if you are installing the heating system without any previous support. The storage tank does not look too good either if you fail to keep it underground.

Yearly servicing of LPG boilers is quite essential to maintain reliability as well as efficiency.

As LPG is fossil fuel, it tends to produce large amounts of carbon dioxide damaging our environment.

## **Alternatives to LPG heating**

If facing high LPG costs does not seem too great to you, you may go for a renewable energy source instead. Solar thermal panels as well as heat pumps are very popular renewable heating options. Aside from that, you will most likely get good incentives for production of heat under the scheme called Renewable Heat Incentive.

## Central Heating System Power Flush

Are you finding that most of your radiators remain cold (or lukewarm at best), despite continually turning up the thermostat? Or are they taking too long to heat up to maximum capacity? Or do some only heat up in some places, and not others? If any of these are the case then you might find that you have a clogged up central heating system. This occurs over a long period of time, as sludge and sediment gradually starts to accumulate in both the pipes and radiators, until the blockage prevents your heating panels from warming up properly; the boiler lacks the power to pump the heat through the level of waste and scale that's gathered together, and as



a result the poor circulation of your heating system leaves you and your family craving the warmth that, although it isn't there, you're ultimately still paying for.

So what's the best solution? Well, the best thing to do is call in a professional heating surveyor or gas inspector to first of all assess the damage and locate the major sources of the problem. If it is simply a case of a blocked heating system, then they will most likely recommend that you **power flush your central heating system**. This involves hiring a professional, fully qualified engineer to clean the system by essentially 'flushing' out all of the built-up dirt and sludge from each outlet and/or clogged pipe, using the most effective tools and fast-working chemical solutions. But how much does flushing a central heating system cost?

### CENTRAL HEATING POWER FLUSH COST

According to [eonenergy.com/powerflush](http://eonenergy.com/powerflush), the final central heating flushing cost usually depends on the size of the home; more specifically, the number of radiators in your home affected by the faulty

system. Under their guidelines the cost of flushing central heating system works out as the following:

- **£600 for up to 10 radiators** (usually around a three-bedroom semi-detached property)
- **£700** between 11-15 radiators (in total)
- An additional **£25** per radiator after that (up to a maximum of 20 radiators/outlets).

You might think this sounds a little expensive for what is basically a ‘clean’ of your system, but power flushing central heating system costs can be ‘recouped’ in reduced energy bills, less wasted heat and the time and money you save on potential follow-up repairs that, when you leave a clogged system unattended, could escalate into a major system overhaul. Therefore it is always advised that you pay the up-front power flush central heating cost by budgeting carefully and comparing a number of different quotes from several companies; some even offer a free follow-up check, so be mindful of looking out for deals that could save you even more cash! Either way, power-flushing your central heating system will certainly seem worth the worry when you can relax in the warm, cosy comfort of your own home again.

## How To Find Qualified Heating Engineers

As the cost of heating increases people are becoming more aware of the cost of their energy. There are a number of ways you can reduce these costs and one of the most effective is changing an old and inefficient boiler for a newer and more energy efficient model. In order to do this you need to find an experienced professional to find the right boiler replacement for you.

### CHOOSING EFFICIENT CENTRAL HEATING BOILERS

The chances are you are probably aware of the benefits of energy efficiency such as fitting double glazing on windows or loft insulation. However a boiler replacement with a high energy efficiency rating can be even more effective because you can get more energy at a lower cost, thus saving you more money in the long term.

When comparing **central heating boilers** online check the product specifications. This ought to give you the energy efficiency rating and the output. While there is nothing wrong with looking for a good deal in terms of price remember that in the longer term a more efficient boiler will result in savings over a longer period of time.

### The best boiler repair

In order to ensure your boiler stays efficient professional repair is vital. The best fit out companies and repair professionals will have the appropriate training and experience. Remember to check their identification to ensure that they are properly registered and their experience is up to do date.

### The right boiler installation

Whether you want electric boiler systems fitted or you are looking to replace your gas central heating boiler you have to be sure that you are getting a reliable service. Do not be afraid to ask questions and to get information on how long the replacement or repair will take place.

It is important that any electric boiler systems or any other form of boiler is properly fitted. Ideally you should contact a professional who is part of a business association or has a central

contact address so you can get in contact with someone if you have any problems.

You should also remember when getting a quote for repair work to fully check the costs involved. For example liability insurance ought to cover any injuries on your property while there may also be additional charges for emergency callouts.

## **Long term gain**

For some people there is the fear that a new boiler installation will be expensive. However the long term gains of fitting more efficient central heating boilers far outweighs the short term investment.

However do not be tempted to cut costs. Avoid any companies that ask for the full amount to install a boiler in cash. Most repair and installation professionals will be willing to either pay in stages through an agreement with the client or send an invoice after the work has been completed.

In short it is worth looking online to find the most efficient central heating boilers available on the market as well as finding boiler repair and installation professionals to ensure they are properly and safely fitted.