 **Al- Mahdi Foundation Energy Action Plan**

**Name:**

**Address:**

**Postcode:**

**Property type:**

**Property age:**

**Heating type:**

Dear Mr . . . .

Thank you for your time during our recent Energy Audit in your home. We hope that you found our discussions useful. You have already taken steps towards reducing your fuel bills and your carbon emissions. **Your property has an energy efficient boiler but you can still reduce your** fuel bills and carbon emissions by wall insulation and installing double glazed windows and draught proofing and installing energy saving bulbs.

There are still some things that you could do to improve the comfort levels in your home and reduce your fuel bills. You will find attached an energy action plan checklist, which recommends a range of measures that you could implement to reduce energy consumption in your home. There is more information on each recommendation attached as well as information on any grants or funding that we are aware of that could help you.

Our recommendations are based on the information you have provided about your home and the figures of potential savings have also been calculated based on your **Actual Annual Consumption.**

If you have any questions, or if I can be of further assistance, please do not hesitate to get back in touch. Our energy officers will be in contact soon to follow up on the actions suggested.

Kind regards

**Al- Mahdi Foundation**

**65 Albert Road, Govanhill, Glasgow, G42 8DP**.

**Office line: 0141 258 3030**

*Foundation is a Scottish Charitable Organisation, registered in Scotland (number: SC002123).*

Your report shows how you could potentially:

• Save around £500 on energy bills each year and

• Reduce carbon dioxide emissions from your home by around 45% (1 tonne of CO2 each year).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Current** | **Potential**  | **Saving**  |
| **Estimated running costs**  |  per year  |  per year  | £ per year  |
| **Estimated CO2 emissions**  |  tonnes per year  |  tonnes per year  | Tonnes per year  |

Storage Heaters

As you informed us, your storage heaters aren’t working and you use electric room heaters. Using room heaters it will cost you a lot more money and produces more CO2 emissions.

Modern slim line fan-assisted storage heaters are better insulated, so are more able to store heat until you want it. Their heat output is more controllable, so you can heat a room up faster or keep it cool if you’re not using it.

Requiring only a normal single rate domestic electric tariff, the most competitive being around 10p per kWh. With this in hand it will be at worst 30% lower in running costs and use 50% less electricity than storage heaters.

**Electricity monitor loan scheme**

An electricity monitor can measure, in real time, how much electricity is being used and shows how much money this is costing. An electricity monitor will not cut your bills but it will highlight where and when you are using electricity. This will allow you to make changes to cut your fuel bills. Al-Mahdi Foundation have electricity monitors that we can loan to you for FREE. We can install the monitor for you for and show you how to use it. Simply let us know that you are interested.

**Room temperature**

When we met you the temperature in your living room was 17 degree If you find yourself too cold during the winter months, you need increase the temperature up to 18 -21 degrees

The recommended temperature for a room thermostat is between 18 to 21 degrees

**Room temperature**

When we met you the temperature in your living room was xxx C and inside the bed room xx C. If you find yourself too cold during the winter months, you need increase the temperature up to 18 -21 C, it will help you to decrease your bills.

The recommended temperature for a room thermostat is between 18 to 21 C. By turning your room temperature down 1⁰C you could save, on average, £55-65 per year on your fuel bills and 260kg CO₂ emissions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Appliance**  | (reduce **Co2e** per year)**kg** | (Saving energy per year)**Kwh** | Saving per year**£** | Action |
| Room temperature (per 1 o C) | 140 | 260 per o C | 55-60 | Room temperature reduction |

**Draught proofing your front door**

During my visit I noticed that the front door of your property would benefit from improved draught proofing. Full draught proofing of a property can save, on average, 30-45 per year on fuel bills. A draught free home can greatly increase your comfort levels and potentially allow the heating to be turned down a little.

We do not have draught proofing strips for around doors and windows you can install these for a small fee, if appropriate for your window/door type. Please get in touch if you are interested in receiving a handyman draught proofing service because we can help introduce to you.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Change / Replacements** | reduce **Co2e** per year**kg** | Saving energy per year**Kwh** |  | Saving per year**£** | Cost of replacement**£** | Payback time (year) | Life expectancy (year) |
| Draught | 160kg | 305 |  | 30-45 | 90 | 2-3DIY | 10 |

**Internal Wall insulation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Change / Replacements**  | reduce **Co2e** per year **kg** | Saving energy per year**kwh** | Saving per year**£** | Cost of replacement**£** | Payback time (year) | Life expectancy (year) |
| Internal Wall insulation | 1000kg | 1912 | 190 | 3000-5000 | 10 | 30 |

**Home Appliances**

You can find in the table how much money / energy can be saved and reduce CO2e per year:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Appliance** | (reduce **Co2e** per year)**Kg** | (Saving energy per year)**kwh** | Saving per year**£** | **Action** |
| TVs | 80 | 165 | 20-25 | (turn off, plug off,NOT on standby) |
| PC, Laptop | 20 | 45 | 7-10 | (turn off, plug off) |
| Washing machine | 250 | 850 | 60 | Using 30 o C |
| Electric shower | 280 | 535 | 40 | Shower time reduction |
| Low Energy Light Bulbs | 150 | 280 | 30 | Switch to Low Energy bulbs |

**Loft insulation**

If you can have some loft insulation, you could save on average £120 per year on your fuel bills and 800kgCO2e per year. Loft insulation will also help your feel warmer, which might mean you don't feel the need to put the heating on as much.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Change / Replacements**  | reduce **Co2e** per year**kg** | Saving energy per year**Kwh** | Saving per year**£** | Cost of replacement**£** | Payback time (year) | Life expectancy (year) |
| Loft insulation | 800 | 1530 | 120 | 250 | 2 | 30 |

**Thermostatic radiator valves (TRVs)**

You informed us during the audit that you would prefer to not using gas, but this is an effective method of heating control and one that we would encourage you to continue.

TRVs reduce the flow of water through each individual radiator that they are fitted to. This allows you to set each radiator to the level that you require. TRVs allow you to control the level of heat in different rooms. This means you can heat occupied rooms more than unoccupied rooms. Lower settings use less energy and also save you money on your fuel bills.

**Using your boiler programmer/timer**

Using a programmer effectively for your boiler means that the heating won’t be on unnecessarily when you’re not at home (college, shopping) or in bed. This can reduce your gas usage and your fuel bills. You can set the timer of your boiler to come on automatically for a few hours in the morning and then again in the evening. This way you don’t have to worry about switching the boiler off or on, and overall the energy use will be lower.

A programmer/timer for your boiler will allow you to set ‘on’ and ‘off’ time periods. During the winter months you should set your heating to come on 20-30 minutes before you get up in the morning and to go off 30 minutes before you go out for the day. In the evening the heating should come on around 30 minutes before you get home to allow the property time to heat up and, again, turn off at least 30 minutes before you normally go to bed.

If you would like more help with setting the timer on your boiler feel free to get in touch with the Al-Mahdi Foundation office.

LED light bulbs

LEDs are a good alternative to higher wattage incandescent or halogen light bulbs. LEDs can be slightly more expensive but they use around 1/10th of the electricity of an equivalent incandescent or halogen bulb and they tend to last around 10 times longer. The light quality of an LED bulb is also better than an energy saving equivalent. LED technology and prices are changing rapidly so it’s worth shopping online, at local hardware shops or supermarkets to find a good deal. LEDs would be most suitable in your front room and kitchen as these are areas that are in use frequently.

I have included a factsheet on LED bulbs to get you started. If you find that LED’s are too expensive, then replacing your 5 standard bulbs with CFL’s, as outlined below, would also help you to reduce your electricity bills.

Energy saving light bulbs

Compact florescent (CFLs) energy saving light bulbs use around 20-25% of the electricity of equivalent traditional bulbs. CFLs are now widely available in supermarkets, DIY shops and online in a range of shapes, sizes and fittings and dimmable bulbs are available now too. They also now reach full light output much more quickly and last ten times longer, on average. Energy saving light bulbs would be most suitable in your front room and kitchen as these are areas that are in use frequently.

**Boiler**

With a new A-rated condensing boiler with a programmer, room thermostat and thermostatic radiator controls (TRVs) could save you:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Change / Replacements**  | reduce **Co2e** per year**kg** | Saving energy per year**kwh** | Saving per year**£** | Cost of replacement**£** | Payback time (year) | Life expectancy (year) |
| Boiler  | 340 | 670 | 100 | 700-1200 | 7-12 | 20 |

**With best wishes**