Save Energy, ***Save*** Money, ***Save*** the planet

Saving through: Lighting

Lighting in our homes amounts to **18%** of the electricity consumption of a typical UK house so it can be an easy focus point to save energy fast.

Solutions:

- Checking which bulbs you use is a key factor in saving money, tungsten and halogen bulbs tend to be the least efficient out of the bunch with tungsten only using **5%** of its energy for light so make sure you **don't** have any of these
- It is recommended that you switch the bulbs in your house to LEDs(the **most** efficient and longer lasting than **all** the bulbs) or CFL bulbs(less expensive that LEDs but more efficient and longer lasting than Tungsten bulbs and Halogen bulbs)

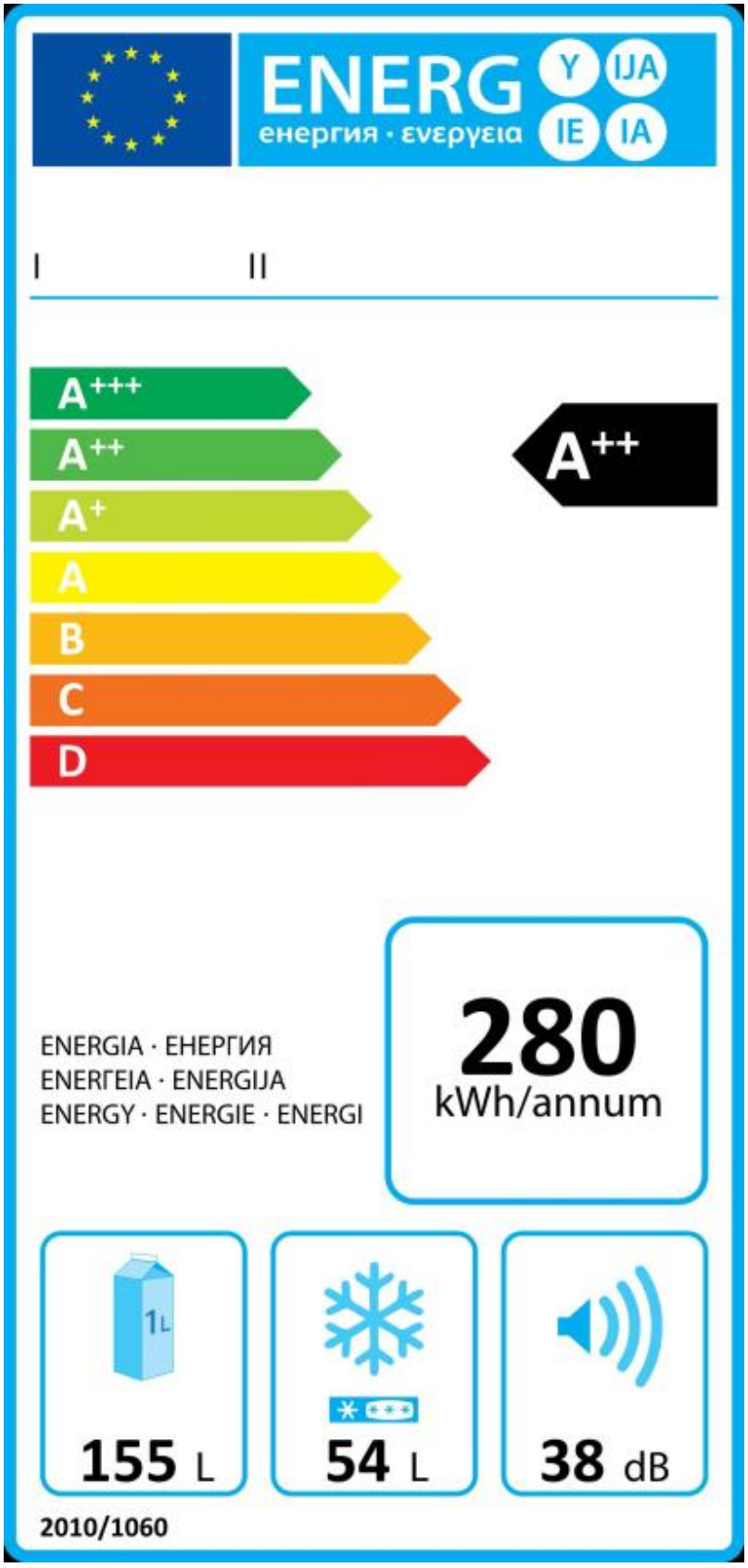
Savings:

- replacing a single Tungsten bulb with CFL could save you **£3 a year**

- replacing a house with energy efficient bulbs would save **£55 a year and £870 over their lifetime**
- a single CFL replacement could save you up to **£60 in its lifetime** and if used for 2 hours a day it will pay for itself **in under a year**

	Energy Efficiency	Colour Temperature	Average Lumens per watt (LPW)	Life Span
LED	Best	Warm to full spectrum (high blue to white colours)	70	20+ years
CFL	Better	Warm to full spectrum (high blue to white colours)	46	4 years
Halogen	Good	Warm	26	1.5 year
Incandescent	Poor	Yellow, warm	13	8 months

Saving through: Appliances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Y
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280
kWh/annum
1L
155 L
54 L
38 dB
2010/1060

Appliances can also play a big role in the amount of energy we consume, amounting to **47%** of the total electricity consumption of a UK house, the **largest** user of energy and CO2 inside the average home

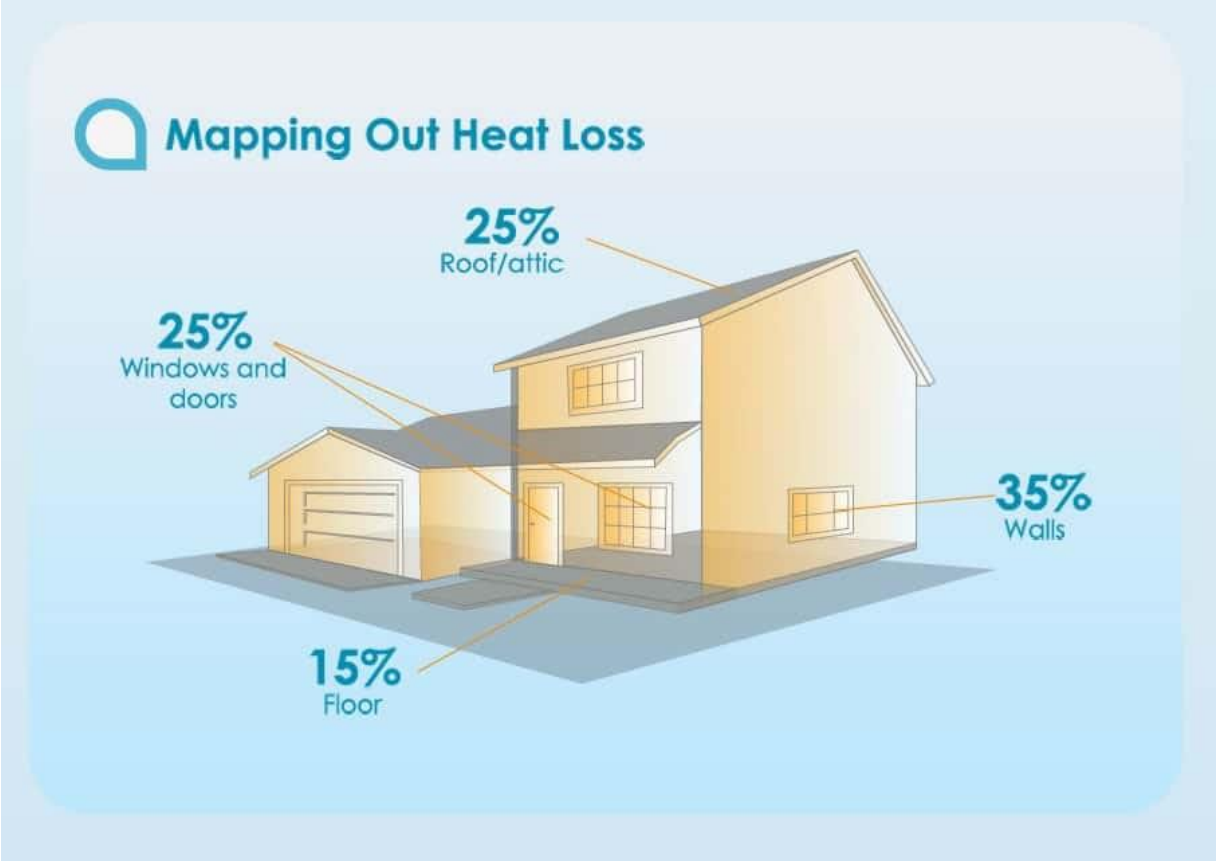
Solutions:

- Methods in cutting down energy use for some appliances could be as simple as turning them off saving **5%** of your energy that would otherwise have been wasted
- **Cooking**- for cooking appliances there are a variety of simple solutions such as not overfilling the kettle, using a toaster for toast rather than a grill or using a microwave when possible(**70-90%** less energy usage than ovens)
- **Fridge, Freezer-** simply replacing an old model for a newer one could use up to **60%** less energy to do the same job, just be sure to look out for the EU energy efficiency rating like the model on the left
- **Others-** look out for the EU energy efficiency ratings (A+++ to G) when buying new ones, for washers look for low water usage appliances and for dryers dry clothes when possible on a rack

Savings:

Appliance	EU energy rating	Annual saving (up to)	Annual carbon dioxide saving (up to)
Fridge freezer	A+ or A++	£40	135kg
Upright or chest freezer	A+ or A++	£26	90kg
Refrigerator	A+ or A++	£17	55kg
Dishwasher	A	£7	25kg

Saving through: Insulation



A home can lose on average: **35%** of its heat from walls, **25%** from the roof, **15%** through the floor and draughts and **10%** from windows, improving your fabrics is an easy way to save energy, money and carbon.

Solutions:

- **Walls-** being the largest source of heat loss most homes built after the **1930s** are already equipped with cavity wall insulation (2 walls separated by an air gap, your wall should be 30cm+) ,if this **is** your home one way you can reduce heat loss is fill these gap with insulative foam which is **cheap** and **efficient,** just be sure to check if it has been done already by looking at the walls for holes where the foam is sprayed in. If this **isn't** you the you have to options for wall insulation, Internal or external insulation

Internal- stud walls filled with fibre that decreases room size but are rigid for fittings and is a cheaper solution**(£5000 to £8000)**

External- adds a thick layer of insulating render to outside walls, it is more **expensive(£9,400 to £13,000)** and changes the look of your home

- **Lofts-** lofts are straightforward to fix just by adding more insulation to your roof, **cheap** and **easy**

- **Windows-** insulating windows is **expensive** but if you have insulated wall and roof and can afford it will be an **effective** solution with double and triple glazing
- **Draughts-** a smaller cause of heat loss but worth investing in solutions e.g. draught excluders as they are cheap and you can do it yourself

Savings:

- **Walls-** internal insulation saves **£445** and **1.8** tonnes of CO2 a year, external saves **£475** and **1.9** tonnes of CO2 a year
- **Lofts-** installing **27cm** of insulation could save **1 tonne** of CO2 and reduce bills by **1/5**
- **Windows-** replacing one sing glazed window with a double or triple will more than **halve** its heat loss and save **£165 a year**

Top tips to take away

These are a selection of methods that can get the ball rolling on your way to saving energy, money and the planet

- **Use an energy metre**- an energy metre can be used to increase you awareness and understanding of your personal energy use, potentially highlighting where you need to work to improve your efficiency
- **When buying appliances look for the EU efficiency label**- the EU efficiency label defines how energy efficient a product is, simply when purchasing a new appliance check the appliance has a high rating(A to A++) and make sure appliances at home don't have a low rating by checking their update one online
- **Replace bulbs-** replacing old bulbs with new bulbs is a simple DIY energy efficiency fix just be sure to pick the right bulb for the right room

Survey:

Here is a small survey that would be very much appreciated if you completed for my DofE volunteering: https://forms.office.com/Pages/ResponsePage.aspx?id=1u3qfje_FUCP6Rn7wsAtVTdq9LQMemNNsX3YCOz8vBxUMTA0UzBLWDlMUE1ESktZTDcyVkFMRVBRWi4u