

- ... that the ancient Greek were the first to use central hearths for indoor heating? The ancient Romans advanced indoor heating systems by developing hypocausts: ducts and pipes carrying furnace-heated air through the floors and walls of homes and public baths.
- ... that it took a lot of time and ingenuity to develop modern indoor heating systems? It still takes the constant work of engineers. manufacturers, installers and maintenance personnel to turn indoor heating into a service that we hardly give a second thought to.
- ... that the average indoor temperature in Britain in the 1950s was 18°C while it is 22°C today? The main reason why people felt iust as comfortable in their homes then as we do now is clothing. Social norms around indoor clothing in winter time have changed.
- ... that about two thirds of all energy consumed by a European household is used for space heating?
- ... that outer space is constantly cooling by about 1°C every three billion years but will never quite reach 0°C due to the background radiation left over from the **Big Bang?** (In case you are wondering: 'universal cooling' has no effect on 'global warming'. The effects of accumulating greenhouse gases in the earth's atmosphere dwarf the overall cooling of the universe.)

THANK YOU! (!)



We are thrilled that you agreed to be part of the **ENERGISE Living Labs** as one of 40 households in Ireland!

With the overall goal to explore change in everyday life, the **ENERGISE** energy initiatives challenge social norms and invite you to experiment with new habits and routines using new objects and skills.



You are not alone!

Across Europe, 320 households are participating in the energy challenges organised by the ENERGISE project. The eight countries involved are: Denmark, Finland, Germany, Hungary, Ireland, Switzerland, the Netherlands and the United Kingdom.







WELCOME TO THE ENERGISE **HEATING CHALLENGE**

As it is getting colder outside, the second four-week challenge of the **ENERGISE Living Labs targets energy** used for heating.

Standards of thermal comfort have changed considerably over time – and can change again! Let's find out together how change can be feasible and fun at the same time!



Our heating challenge focuses on heating bodies instead of **heating homes.** We all know that people prefer different indoor temperatures and have their own ways to keep warm in winter time. A common strategy is setting indoor temperatures somewhere in the range of 20-24°C.

We invite you to challenge yourself to heat your home to a lower temperature. To get started. please read through this leaflet and take a look at the content of your 'heating challenge kit'.

If you do not remember the exact temperature vou have agreed for this challenge, please consult the challenge card you filled in a few weeks ago or contact your local research team.

Thank you in advance for continuing to fill in the weekly surveys and the laundry and heating diaries!





YOUR CHALLENGE KIT

ASSORTMENT OF TEA, COFFEE & HOT CHOCOLATE

Comfort, relaxation and warmth comes from enjoying a hot drink – after dinner, when meeting friends, watching a movie or reading a good book!

MUG

Enjoy your hot drinks from a mug especially designed for our ENERGISE Living Lab participants!

WOOLLEN SOCKS

Warming the neck, wrists, toes and ankles is important when trying to keep comfortable in a cold(er) environment. These socks will help keep you warm.

YAHTZEE (GAME)

Yahtzee can be played from the age of six or seven, alone or in a group. Instead of spending an evening watching TV or surfing the web, huddle up with your family or invite over others to play and to get warm from laughter and shaking that dice cup! (In the spirit of our challenge, do not forget to turn down the heating in unused rooms and remind everyone else to do the same)

If you feel you have enough games, mugs or socks, please ENERGISE others and pass on any items contained in this kit that you do not need or do not like!

Try This!



Have a 'heat meal': cooking heats the body – and the kitchen! Invite friends, family or neighbours and

consider making this a regular event, taking turns at cooking and treating each other to nice meals (but remember to turn down the heating in unused rooms and homes and ask others to do the same).



Heat bodies, not homes: Wear slippers, an extra layer of clothing and cover up with that cosy blanket you've still got somewhere, especially when sitting or lying down for a while.

Close those blinds at night to keep out unwanted looks – and unwanted cold!





Be creative: Re-arrange your furniture if positioned in front of radiators or if your couch or bed is placed against a colder exterior wall. If you have a space heater, take extra care to keep everything at a distance of at least 1m!

Heat and health go well together!Physical activity at home makes you warm – and fit.





What you see is what you feel: decorate your home with warm colours like red or orange to create a sensation of warmth.

If you have more ideas, please share!
e: eimear.heaslip@nuigalway.ie
t: 083 060 0960

Tips & Tricks



TURN DOWN THE HEATING BY 2-3°C:

When airing a room.

When not at home.

About an hour before going to bed.

GOOD AIRING PRACTICES

 Turn down the heating and open the window widely (no tilting!) for 5-10 minutes.



- Repeat 2-3 times per day. Don't
 be afraid to let heat escape during this time: It
 takes less energy to heat fresh air than to heat
 stuffy, moist air.
- Take care to avoid keeping the window open for more than 15 min. If the window is open for much longer, walls and floors will cool down and it costs more energy to re-heat the room.



SHUTTING OUT DRAUGHTS

Make sure to always close your windows properly. If you detect a draught, there are some inexpensive yet highly effective

measures you can take, for example draught excluding tape on (attic) doors and windows.

MAINTENANCE FOR EFFICIENCY

Have your heating system checked once per year to ensure it lasts longer and works as efficiently as possible. Also: keep your radiators clean!