



# What is the secret to eco-friendly homes?

## Explanatory video transcript

(0:08) What's the secret to eco-friendly homes?

(0:12) One way to help stop the sea level from getting higher is to reduce our carbon footprint.

(0:19) Every time we do something that uses energy, like when we switch on a light, heater, or air conditioner, we create a carbon footprint.

(0:29) But we can try to make our carbon footprint smaller by using less energy.

(0:35) One way to reduce our carbon footprint is to use less energy to maintain a good temperature in our homes.

(0:43) But how can we build better?

(0:47) What materials can we use to maintain the temperature of a house? Shall we investigate?

(0:54) We can use nature and the characteristics of some animals that live in extreme temperatures to get ideas about how best to insulate a house.

(1:06) The camel in the desert can support high temperatures during the day and low temperatures at night.

(1:12) The fine woolly coat insulates the body reducing its fluctuations.

(1:20) When we are cold, what do we use?

(1:23) For example, a very warm woollen jumper. A wool jumper has a lot of air between the fibres.

(1:30) We can think of insulators that also have plenty of air, such as straw, paper, cotton and, wool.

(1:43) Let's look at the results of our experiment. The longer it takes the ice to melt, the better the insulating material is.

(1:52) From all the materials studied wool was the one that best prevented energy transfers, being the best insulator tested.

(2:03) Buildings use large amounts of energy to heat and cool. We can use less energy by using good insulators to help regulate the temperature inside.

(2:15) After we build our house, we can paint it. What colour are we going to paint it?

(2:24) This could be the next investigation.

(2:29) Don't forget, it's important for all of us to take care of our planet.

