

## Nottingham Spearheads Green Revolution with Trial of Grapheneinfused Infrared Wallpaper

2024-03-05 Explore the groundbreaking trial in Nottingham testing electric infrared wallpaper filled with graphene to provide efficient and customizable heating solutions for social housing and older properties, combating fuel poverty and advancing sustainability.

In the heart of Nottingham, a groundbreaking trial is underway that could revolutionize the way we heat our homes, especially those that have long battled with the specter of fuel poverty and inefficient insulation. Developed by <u>NexGen Heating</u>, a trailblazing invention - electric infrared wallpaper filled with graphene - is set to be tested in homes that have struggled to keep warm without breaking the bank or harming the planet. This initiative, targeting social housing and older properties that are notoriously hard to insulate, promises not just warmth but a leap towards a greener future.

## A Glimpse into the Future: How It Works

The core technology behind this innovative heating solution is graphene, a material known for its remarkable conductivity and flexibility. By infusing wallpaper with graphene, NexGen Heating has created a product that emits infrared heat, warming objects and people directly in a manner reminiscent of sunlight. This direct form of heating is not only efficient but also customizable to fit the aesthetics of any room, promising an unobtrusive addition to homes. Furthermore, the potential for integration with solar panels and batteries could make this a cornerstone of sustainable living, significantly reducing reliance on fossil fuels.

## **Empowering Communities and the Environment**

One of the most compelling aspects of this trial is its focus on social housing and homes facing fuel poverty. With 45 social housing groups across the <u>UK</u> participating, the aim is

clear: to offer a lifeline to those who have been disproportionately affected by the rising costs of heating and the challenges of insulating older properties. Ian Sanderson, CEO of NexGen Heating, emphasizes the dual goal of aiding those in fuel poverty while advancing environmental stewardship. This approach not only addresses immediate human needs but also aligns with broader efforts to combat climate change by reducing carbon emissions.

## Nottingham: A Beacon of Innovation

At the forefront of this trial is Nottingham, a city that has become a beacon of innovation thanks to the collaborative efforts of NexGen Heating, Nottingham Trent University, and the Nottingham Community Housing Association. Researchers, led by Dr. Mike Siebert, are keenly exploring the viability of infrared heating in older properties, which typically require costly retrofitting to transition away from traditional oil and gas heating systems. The infrared wallpaper, with its ability to act as a 'thermal battery' by retaining heat in fabrics and releasing it slowly, offers a promising solution that could make green electric heating accessible to more homes.

In summary, the trial of electric infrared wallpaper in Nottingham represents a significant step forward in the quest for sustainable and equitable heating solutions. By harnessing the power of graphene and the principles of direct infrared heating, this initiative has the potential to transform the lives of individuals in fuel poverty and pave the way for a greener future. As the trial progresses, the eyes of the world will undoubtedly be on Nottingham, watching as it leads the charge towards a more sustainable and inclusive approach to home heating.

Read the original article on BNN Breaking.