
Haydale Announces New Contract with Cadent for Graphene Ink-based Low-power Radiator Heaters

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Haydale has announced its next collaboration with Cadent, to develop graphene ink-based low-power radiator heaters. The £350,000 three-stage project will run for 12-months and is aiming to develop a tested and validated market-ready product as a cost-effective alternative for Cadent's customers when their gas supply is interrupted.

Following continued success on the low-power, battery operated water heating development, the aim for the latest project is to incorporate the same graphene-ink based technology into different designs to deliver bespoke solutions for a wide range of customer requirements.

Currently, the provision of fan heaters or oil filled radiators to Priority Services Register (PSR) customers, or those in a vulnerable situation without a gas supply, can be expensive and challenging, particularly for those in ill health, elderly or disabled customers. Therefore, Cadent is looking for a next generation solution to provide an alternative heat source that is easy to manage and ensures the customer experiences no, or minimal, disruption in their day to day lives. This development will create a low power alternative radiator heating solution, it will resemble the look of a standard radiator, so it aesthetically fits in to the home environment.

Development of graphene-based, high conductivity inks and coatings that can be applied to surfaces have the potential to provide even heating across large areas with a very thin profile. This technology is made possible by Haydale's patented HDPlas[®] process, which promotes efficient dispersion of nanomaterials and allows the surface chemistry to be altered to improve the physical and electrical properties.

This project will be completed over three stages, [Haydale](#) will provide its time and expertise and work with Cadent to develop the concept, product specification and design that will

integrate with Haydale's printed graphene heater panels to create a tested and validated solution.

Keith Broadbent, Haydale's CEO, said: "We look forward to our continued collaboration with Cadent on the use of Haydale's functionalized inks in the energy supply market. Our next generation graphene-based technology has already demonstrated value with the low-power water heater development. This latest innovation aligns with Cadent's commitment to supporting its customers in vulnerable situations to make them feel safer in an off-gas situation and be able to still live independently in their home."

Mark Pritchard, Cadent's Innovation Specialist, added: "When a gas supply is interrupted, it can be quite concerning for customers and so our teams work extremely hard to repair any issues as quickly and safely as possible. We are looking forward to once again working alongside Haydale on this innovative project to find an alternative heat source that is easy to manage and ensures customers experience minimal disruption in the event of a loss of gas. Ensuring customers remain safe and warm in their homes is always our top priority and it's particularly important that those in the most vulnerable situations, are able to heat their homes to the optimum temperature, allowing them to stay warm and live independently."

Read the [original article](#) on Graphene-Info.