

For Immediate Release - Loxone / eHome2:

Loxone: Proudly automating eHome2 for the Future Homes Standard.

Saint-Gobain, Barratt Developments, and University of Salford Collaborate to Test Net Zero Home of the Future: eHome2

Reading, UK - Thanks to the powerful collaboration between Saint-Gobain, Barratt Developments, and the University of Salford, the groundbreaking research project eHome2 has been launched. The project aims to identify new methods, materials and technology for creating net zero homes of the future. This research project will be providing valuable insights into sustainable housing solutions. Loxone, a leading provider of building automation solutions, takes charge of the building automation system, specifically enabling detailed energy management and while also being the complete smart home solution for the build.

Located within the University of Salford's Energy House 2.0, eHome2 is a three-bedroom detached house constructed inside one of the two climatic chambers. This unique research facility enables comprehensive evaluation of energy-efficient building materials, technologies, and systems in a realistic environment. In the chambers, researchers have the ability to simulate various climatic conditions; ranging the temperature between -20°C and 40°C, and even generating heavy winds and snow. Also, for note, the Energy House 2.0 project is being part-funded by the European Regional Development Fund

The collaboration between Saint-Gobain, Barratt Developments, and the University of Salford allows for in-depth research and testing, taking place over nine-months, of various solutions inside eHome2 itself. Loxone serves as the central management hub for the different technology such as different mechanical ventilation and infrared heating options. For example, the home includes both Mechanical Extract Ventilation (MEV) and Mechanical Ventilation Heat Recovery (MVHR) systems - and researchers can seamlessly switch between these using the Loxone interface, while also being able to monitor valuable datasets such as the temperatures in each room and how these vary based on the system being used and the outdoor weather conditions being simulated.

Loxone is not only being used for the intelligent and seamless automation and control of the various systems being used from an efficiency point of view, it is also the smart home solution in eHome2. The potential home of the future has smart colour changing lighting, individual temperature control in each room, multiroom audio throughout, water leak detection, smart access control for both the occupants and visitors, and a smart burglar alarm - all enabled natively with the Loxone system. These features are part of the research to set new levels of comfort and security without compromising on convenience for potential users.

Overall, through the integration of Loxone's cutting-edge technology, eHome2 sets a new standard for smart home features and building management, with a strong focus on energy efficiency.



The energy efficiency aspect is also intuitively built-in with Loxone's advanced automation system throughout eHome2. For instance, the system automatically turns off heating in a room when a window in that room is opened, extends heating schedules based on room occupancy, diverts excess solar power to charge the electric car based on different priorities in the home, stores excess solar energy by heating up hot water tanks, and automatically opens or closes the blinds and curtains for passive heating and cooling.

Zach Meek from Zmart Hohm Ltd - who spearheaded the inclusion of the Loxone solution in the eHome2 project - expressed enthusiasm for the project's future. "The eHome2 project represents a significant milestone in the exploration of sustainable housing solutions," said Zach Meek. "Automation has a key role to play in maintaining comfort and energy management. We are proud to be part of this groundbreaking project and look forward to the future data released by the University of Salford."

Cameron Drew, head of commercial projects for Loxone in the UK, reiterated the potential intelligent smart home technology plays in homes of the future. "Having a smart meter in your home showing the cost of energy consumption is one thing - whereas having a solution that can help identify the power guzzlers in a building, reduce the consumption baseload, and shift the power demands to times of cheaper or free energy is completely different. Loxone does this and much more while maintaining an attractive return on investment period."

Quotes:

Zach Meek, Zmart Hohm (Loxone Installation Partner)

"Energy Management is baked into the core foundation of Loxone so it was a perfect match for us when designing the house of the future alongside Saint-Gobain & Barratt Developments, I strongly believe there is no other solution available on the market today that could of achieved what has been done with Loxone technology on the eHome2 project.

Loxone has allowed us to create the perfect ecosystem of technology within eHome2, not only has Loxone provided the ability to integrate all of this innovative technology but also optimise, automate and monitor absolutely everything from the heat pump to the shower head!"

Cameron Drew, Loxone UK

"With Loxone being a leading energy management & building automation solution, the Miniserver is the brain of eHome2. Within eHome2 there are several technologies which need to work harmoniously and others which are being compared for their efficiency and controllability, so there was a need to isolate these during testing. Loxone is orchestrating the Lighting, Heating, Ventilation, Shading, Audio, Energy Management, Access, Safety & Security whilst providing monitoring with statistics, graphs, and control via the Loxone App with a familiar interface for the user.

Working alongside Zmart Hohm we have brought eHome2 to life. The house can now operate intelligently with minimal human interaction making for a familiar comfortable home. Zmart Hohm designed detailed drawings, schedules, and documentation for the Loxone and Electrical installation, then delivered the Loxone panel to site making for a seamless experience for the electrician onsite. I worked alongside Zmart Hohm during the commissioning and configuration process to deliver all the features required to allow eHome2 to set the standard of future homes."

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The collaboration - From Left to right: Eion Reynolds (Senior Site Manager, Barratt Developments), Professor Richard Fitton (Technical Lead for Energy House 2.0, University of Salford), Zach Meek (Automation Engineer, Zmart Hohm), Daniel Shea (Assistant Site Manager, Barratt Developments), Tom Cox (Technical & Developments Director, Saint-Gobain Offsite Solutions UK & I), Joe Lewis (Offsite construction consultant and director, Optima offsite Ltd), Alex Baines (Interior Solutions, Saint-Gobain) and Oliver Novakovic (Technical & Innovations Director, Barratt Developments).



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Left: Zach Meek, Owner at Zmart Hohm Ltd – responsible for the design & installation of the Loxone hardware at eHome2. Right: Cameron Drew, Head of Commercial Projects at Loxone UK – responsible for the programming of the Loxone installation.





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An outside aerial view of Energy House 2.0, the University of Salford research facility in which eHome2 is



situated.

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The outside of eHome2, the Saint-Gobain and Barratt Developments research house. Located inside of the University of Salford climate chamber research facility (Energy House 2.0).



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Inside eHome2 - Loxone is seen throughout eHome2 in the foreground and also a lot behind the scenes. Loxone is however particularly obvious in the kitchen/dining area. Seen here is the Loxone Touch Pure, Loxone Pendulum Slims, Ceiling Speaker, Smart Socket, and the Digital Experience Tour.

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Inside eHome2 - Loxone is seen throughout eHome2 in the foreground and also a lot behind the scenes. Loxone is however particularly obvious in the bedroom. Devices seen in the bedroom include the Touch Nightlight Air, Door & Window Contact, LED Spots and poster explaining Loxone's Ambient Assisted Living features.



© Loxone UK

The Zmart Hohm Loxone control Panel in eHome2 that is the central hub controlling all of the holistic automation ecosystem in the building



© Loxone UK

Showing the power of The University of Salford's Energy House 2.0 climatic chamber. That puts eHome2 and its technology to the test

LOXONE

About Loxone

The Loxone Group from Kollerschlag, Austria, is a pioneer in the field of intelligent automation solutions. As a specialist, Loxone enables the simple control and intelligent automation of projects of all kinds. Whether it's your own home, hotel, office or commercial property - Loxone makes life and work easier in every situation. More than 250,000 projects in more than 100 countries have already been realised by professional Partners worldwide. Authorised Loxone Partners appreciate the high innovative power of Loxone, the free software in combination with the ease-of-install of the products as well as the numerous, open interfaces that can be controlled by the central Miniserver. This is the heart of every Loxone project and the ultimate tool for the intelligent automation of smart homes, commercial properties and special applications. The Miniserver was specially developed for the professional electrician. As the "brain", this central control unit handles most of the tasks of building and home automation in terms of security, comfort and energy efficiency itself. The Loxone Group has more than 600 employees at 27 locations worldwide. More than 120 employees work at the company headquarters in Kollerschlag, Austria. The Loxone Campus, the epicenter of European building automation, is currently being built here - a unique intelligent building ensemble consisting of a hotel, office, restaurant, spa, conference and event space, logistics centre, and training wing.

About Saint-Gobain Off-site Solutions UK&I

Saint-Gobain designs, manufactures and distributes materials and solutions for the construction, mobility, healthcare and other industrial application markets. Developed through a continuous innovation process, they can be found everywhere in our living places and daily life, providing wellbeing, performance and safety, while addressing the challenges of sustainable construction, resource efficiency and the fight against climate change.

This strategy of responsible growth is guided by the Saint-Gobain purpose, "MAKING THE WORLD A BETTER HOME", which responds to the shared ambition of all the women and men in the Group to act every day to make the world a more beautiful and sustainable place to live in.

€44.1 billion in sales in 2021 More than 167, 000 employees, located in 76 countries Committed to achieving Carbon Neutrality by 2050

For more details on Saint-Gobain, visit www.saint-gobain.com and follow us on Twitter @saintgobain

About Energy House 2.0

The project is receiving up to £8,244,043 of funding from the England European Regional Development Fund as part of the European Structural and Investment Funds Growth Programme 2014-2020. The Ministry of Housing, Communities and Local Government (and in London the intermediate body Greater London Authority) is the Managing Authority for European Regional Development Fund. Established by the European Union, the European Regional Development Fund helps local areas stimulate their economic development by investing in projects which will support innovation, businesses, create jobs and local community regenerations. For more information visit

https://www.gov.uk/european-growth-funding.



European Union

European Regional Development Fund



If you have any queries, please contact the following people:

Contact Loxone:

Jacob Sugden Marketing UK The Forum, Station Rd, Theale RG7 4RA

E: marketing@loxone.co.uk

Cameron Drew Head of Commercial Projects UK The Forum, Station Rd, Theale RG7 4RA

T: 0118 204 9933

E: cameron.drew@loxone.com

Contact Saint-Gobain Off-site Solutions UK&I:

Evie Luxton
Digital Marketing and Social Media Communications Executive
Saint Gobain House,
East Leake,
Loughborough,
Leicestershire
LE12 6JU

T: 07514 316742

E: evangeline.luxton@saint-gobain.com