

## **Arrabawn Partners with RedoxBlox, Climeaction, and VIOTAS to Launch Groundbreaking Heat Battery Technology in Ireland**

Nenagh Ireland – [22<sup>nd</sup> November 2023] – In a historic move marking a significant step forward in renewable energy utilisation in the food and dairy industry, Arrabawn has joined forces with RedoxBlox, Climeaction, and VIOTAS to introduce an innovative heat battery technology, a first of its kind both in Ireland and within the Food & Dairy sector globally.

The RedoxBlox Thermochemical heat battery is a pioneering solution capable of storing excess electricity generated during peak renewable energy periods. It utilises a thermochemical redox reaction process to convert and store this energy as chemical and sensible heat energy, which can then be deployed as heat to replace fossil fuels. This technology has energy density on par with Li-Ion and 3-5x that of a state-of-the-art conventional heat battery. This technology also stands out for its ability to generate heat up to a maximum temperature of 1500 degrees Celsius.

Arrabawn has long been a trailblazer in energy efficiency within the dairy sector. This collaboration represents the next phase in their transformative energy journey. The initiative brings together four key partners:

**RedoxBlox:** The innovators behind the heat battery technology.

**Climeaction:** Climate Action Solutions provider specializing in Large Industrial & Food & Dairy decarbonization.

**VIOTAS:** Specialists in demand-side management technology, tasked with integrating the heat battery with the smart grid.

This multi-million euro investment project is not just a leap in industrial heating and smart grid innovation in Ireland, but it also promises significant carbon savings. The technology demonstrates the potential for wide-scale application in sectors traditionally challenging to decarbonize, especially those requiring high-temperature heat.

The project underlines Ireland's commitment to cutting-edge renewable energy solutions and sets a global precedent in the sustainable transformation of the food and dairy industry. The collaborative effort between Arrabawn, RedoxBlox, Climeaction, and VIOTAS is a testament to the power of partnership in driving forward the green revolution.

**About Arrabawn:** Arrabawn has been a leader in sustainable practices within the dairy industry, consistently pushing the boundaries of energy efficiency and environmental stewardship.

**About RedoxBlox:** RedoxBlox is at the forefront of Thermochemical energy storage technology, pioneering solutions that harness and store renewable energy for industrial use and power generation.

**About Climeaction:** Climeaction is Ireland's leading Climate Action solutions providers to business, working from Micro to Mega scale.

**About VIOTAS:** VIOTAS is a leader in demand-side management technology, innovating in the integration of renewable energy solutions with the smart grid.

For more information, please contact:

[info@redoxblox.com](mailto:info@redoxblox.com)

This project marks a significant milestone in Ireland's journey towards a more sustainable and environmentally responsible future.