

UK-based developer is looking for manufacturers of infrared heaters or coolers interested in a joint EUROSTARS funding application to integrate a personalised indoor climate controller that enhances comfort while reducing energy consumption.

## Summary

Profile type	Company's country	POD reference
<b>Research &amp; Development Request</b>	<b>United Kingdom</b>	<b>RDRGB20250901014</b>
Profile status	Type of partnership	Targeted countries
<b>PUBLISHED</b>	<b>Research and development cooperation agreement</b>	<b>• World</b>
Contact Person	Term of validity	Last update
<a href="#"><b>Enrico FRANZIN</b></a>	<b>1 Sep 2025</b> <b>1 Sep 2026</b>	<b>3 Sep 2025</b>

## General Information

### Short summary

UK-based SME with an award-winning innovative thermal comfort controller, THERCOM, allowing users to control their energy systems by expressing how hot or cold they feel instead of setting specific temperatures. They are looking to integrate THERCOM with off-the-shelf infrared heaters or coolers to provide intuitive user-friendly interaction with infrared systems based on user thermal comfort feedback rather than temperature setpoints. They company are looking for R&D partnerships for EUROSTARS.

### Full description

The company are an engineering technology and energy consultancy founded in 2020, specialising in energy efficiency and immersive technology solutions. The company develops AI-powered optimisation systems, IoT-integrated (Internet of Things) smart infrastructure, and VR-based training environments, helping businesses improve operational efficiency, sustainability, and workplace safety.

### Technology & solutions on offer:

They offer an award-winning intuitive indoor climate controller THERCOM that enhances occupant comfort while

optimising energy use. Unlike traditional thermostats, THERCOM lets users express their thermal preference rather than setting specific temperatures, leveraging IoT algorithms to reduce energy consumption by 40%. THERCOM won TeesTech Innovation of the Year 2023 award. It integrates with smart building systems and aligns with sustainability regulations for energy efficiency.

Type of cooperation sought:

They seek international R&D partnerships with infrared heating or cooling system manufacturers eligible for EUROSTARS funding, to integrate THERCOM into off-the-shelf infrared heating or cooling solutions, enabling intuitive user interaction based on thermal comfort feedback rather than temperature setpoints. The ideal collaboration would involve joint product development, system compatibility validation, and market deployment strategies, ensuring seamless integration and scalability across smart building applications and energy-efficient climate control solutions.

Desired outcome & partnership vision:

The partnership will develop and test an innovative thermal comfort-based solution for controlling infrared heating or cooling devices. It will also contribute to the long-term vision of establishing sales channels and wide-scale adoption in sustainability-driven markets, providing a competitive advantage through innovative thermal comfort control.

Eurostars is a European funding programme supporting R&D-performing SMEs working on market-driven innovation projects with international partners. It offers up to €360,000 in grant funding per UK partner, making it ideal for collaborative technology development like this.

They are looking to engage with European companies, research organisations, or technology developers in infrared systems, smart energy, user interface design, or behavioural energy modelling to co-develop this next-generation solution.

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Advantages and innovations

1. User-Centric Comfort Control

Unlike conventional thermostat-based climate systems, THERCOM allows users to express their thermal comfort level (hot/cold) rather than adjusting precise temperatures. This human-centric approach enhances user experience and reduces inefficiencies in infrared heating/cooling.

2. IoT-Driven Optimisation

THERCOM leverages IoT sensor integration to continuously adjust operation of infrared heaters/coolers based on real-time occupant feedback and environmental conditions. Competitor solutions often rely on manual on-off controls rather than automation through dynamic user inputs.

3. Proven Energy Savings – 40% Reduction

THERCOM field tests have demonstrated an average 40% reduction in energy consumption, significantly outperforming traditional HVAC system controls. Many existing solutions focus on reactive control, whereas THERCOM provides proactive, user-responsive adjustments to maximise efficiency.

4. Smart Integration & Scalability

Compatible with off-the-shelf smart plugs, smart valves and smart thermostats, THERCOM easily integrates with existing HVAC (Heating, Ventilation, and Air Conditioning) infrastructure, smart building systems, BMS (Building Management System) platforms, and IoT-enabled automation, providing a seamless upgrade path without extensive retrofits. Competitor solutions often require high-cost hardware replacements.

5. Sustainability & Compliance

THERCOM supports net-zero building initiatives, reducing carbon footprints through intelligent climate control. It aligns with U.S. and EU energy efficiency standards, making it highly attractive for regulatory compliance and green certifications.

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#### Technical specification or expertise sought

The potential partner should have expertise in manufacturing infrared heating and cooling systems, including hardware integration and control algorithms. Key technical requirements include:

- Compatibility with IoT & Smart Control Systems – The Ability to integrate infrared solutions with third-party climate controls will be useful.
- Sensor & Feedback Integration – Support for real-time thermal comfort input rather than fixed temperature setpoints will be essential.
- Energy Efficiency & Regulatory Compliance – Knowledge of building standards, HVAC efficiency protocols, and sustainability certifications will be useful.
- Software & Firmware Adaptation – Ability to adjust device firmware for seamless communication with THERCOM will be essential.
- Testing & Validation Capabilities – Capacity to conduct performance validation, interoperability testing, and user experience trials will be useful.

#### Stage of development

**Under development**

#### Sustainable Development goals

- **Goal 7: Affordable and Clean Energy**
- **Goal 11: Sustainable Cities and Communities**
- **Goal 13: Climate Action**
- **Goal 12: Responsible Consumption and Production**

#### IPR Status

**Secret know-how**

#### IPR Notes

## Partner Sought

#### Expected role of the partner

The potential partner is expected to provide technical expertise in manufacturing infrared heating and cooling systems, ensuring seamless integration with THERCOM.

Specifically, they should:

- Adapt existing hardware to support thermal comfort-based control rather than traditional temperature settings.
- Ensure IoT compatibility for real-time user feedback and AI-driven climate optimisation.
- Collaborate on firmware and system adjustments to ensure smooth interoperability with THERCOM.
- Validate performance and energy efficiency through testing and user trials.

- Support market deployment, assisting with product positioning and regulatory compliance.

## Type of partnership

**Research and development cooperation agreement**

## Type and size of the partner

- **SME 50 - 249**
- **Big company**
- **Other**
- **SME 11-49**
- **SME <=10**
- **University**
- **R&D Institution**

## Call Details

## Framework program

**International cooperation**

## Call title and identifier

**EUROSTARS**

## Submission and evaluation scheme

## Anticipated project budget

## Coordinator required

**No**

## Deadline for EoI

**1 Sep 2026**

## Deadline of the call

**1 Sep 2026**

## Project duration in weeks

## Web link to the call

Project title and acronym

## Dissemination

Technology keywords

Market keywords

- **06008 - Energy Storage**
- **06006001 - Thermal insulation**
- **09004008 - Other manufacturing (not elsewhere classified)**
- **06006003 - Heat recovery**

Targeted countries

Sector groups involved

- **World**