

Wielenin-Kolonia 12/05/2023

Dr. Sergii Bepalko
Coordinator of WASTE4PCM Consortium
Research and Innovation Centre Pro-Akademia
9/11 Innowacyjna Street
95-050 Konstanytown Lodzki, Poland

Letter of support for WASTE4PCM project:

Waste-based Phase-Change Materials for the Industrial Waste Heat Harvesting and Latent Heat Storage Applications

Dear Dr. Bepalko,

As a leading Polish company in the field of thermal insulation, we are writing to express our strong interest in the WASTE4PCM project proposed by researchers and innovators from Latvia, Turkey and Poland, under your auspices. At K-FLEX, we recognize the importance of finding sustainable solutions for waste heat management and energy efficiency, and we believe that the proposed project could be instrumental in achieving these goals.

As part of our operations, we generate a significant amount of waste heat, which we currently do not utilize fully effectively. This results in higher operating costs and environmental impact. We believe that the use of waste-based phase-change materials, as proposed in the WASTE4PCM project, can help us address these challenges and improve our overall performance. At the same time, we would be happy to see if the developed waste-based PCMs could be integrated with the insulation materials that we currently produce.

We are interested in learning more about the actual results of your planned project aiming to develop a stable polymer wax-in-glycerin slurry as a novel high-temperature heat transfer fluid and heat storage medium simultaneously, based on industrial byproduct - glycerin - and waste resources: plastic waste-based polymer waxes and biosurfactants synthesized from waste cooking oil. This approach has the potential to significantly enhance energy efficiency, reduce waste, and lower operating costs, not only at our company, but in many industrial applications.

If your project is successful, we would be interested in exploring how our company could be engaged in collaboration with you on commercializing the results of the project. In this regard, we see several potential benefits for our company, including:

- Improved energy efficiency: The use of waste-based phase-change materials as a heat transfer fluid and heat storage medium can help us reduce waste heat and improve energy efficiency in our production processes, lowering our operating costs.
- Enhanced environmental performance: By utilizing waste-based materials, we can reduce our environmental impact and promote sustainable practices.
- Competitive advantage: The use and/or possibly production of innovative waste-based phase-change materials can give us a competitive advantage in the market and attract new customers who value sustainability and energy efficiency.

We believe that the WASTE4PCM project has significant potential to address our specific needs and operations, and we are excited about the opportunity to collaborate with your team to commercialize the expected results of the project.

Sincerely,


Kamil Maszczyk
Project Manager