presented by
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Who are you, and what is your organization's area of expertise?

Maria Ganzha, Associate Professor at Systems Research Institute Polish Academy of Sciences

At SRIPAS we specialize in intelligent decision support and control systems. Dedicated to providing intelligent solutions, our team provides expertise in neural networks, machine learning, multi-agent systems, and data analysis. With proficiency in data interoperability and distributed systems, we've contributed to numerous research projects, gaining valuable experience in international collaboration.

What is your vision for FlexBIT?

Our vision for FlexBIT is to drive the future of intelligent and sustainable systems by advancing decision support, control technologies, and data-driven solutions. We believe that by optimizing energy management and improving sustainability of energy communities, we can contribute significantly to the project's success and help shape a sustainable energy future.

What specific role does your organization play in FlexBIT?

In FlexBIT, our organization is responsible for advanced short-term energy forecasting and data management. This involves developing AI solutions that take into account dynamic environments and provide accurate estimations of available energy from PV farms, which are crucial for energy supply guarantees and grid stability.

What are the key outcomes your organization hopes to achieve in FlexBIT?

Through our involvement in FlexBIT, we aim to achieve a noticeable improvement in prediction accuracy for energy demand and supply. These include collaborating with industry partners (Electrun, aRTE Möbel, Aue Funeral) and focusing on elevating existing systems at hand, which will provide additional layer of flexibility to energy communities, reduce energy costs and promote sustainable energy usage in industry.
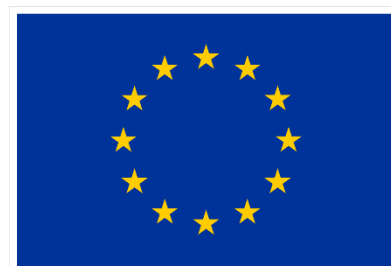
Why is FlexBIT important for Europe's energy transition?

FlexBIT is an essential component of Europe's energy transition as it transforms energy consumers into active participants in an intelligent, flexible energy ecosystem. The project addresses challenges like grid instability, energy storage limitations, and demand-response modelling, improving the resilience of the energy grid. By leveraging advanced technologies including AI, FlexBIT optimizes energy consumption, accelerating the process of decarbonization and supporting Europe's goal of a zero-carbon future.

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