



FlexiBIT

**presented by Dr.-Ing. Pio Alessandro Lombardi
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Who are you, and what is your organization's area of expertise?

Dr.-Ing. Pio Alessandro Lombardi,
Project Coordinator at Fraunhofer IFF.

At Fraunhofer IFF, we specialize in the development and application of advanced industrial and energy systems. Our team is committed to driving innovation in flexibility management, energy efficiency, and sustainable technology integration.



What is your vision for FlexBIT?

Our vision for FlexBIT is to unlock the potential of energy flexibility across residential, tertiary, and industrial buildings. By introducing horizontal and vertical energy exchanges, we aim to enable seamless cooperation within and between energy communities. This approach, supported by advanced AI and digital platforms, will significantly enhance the integration of renewable energy and contribute to a resilient and sustainable energy future for Europe.



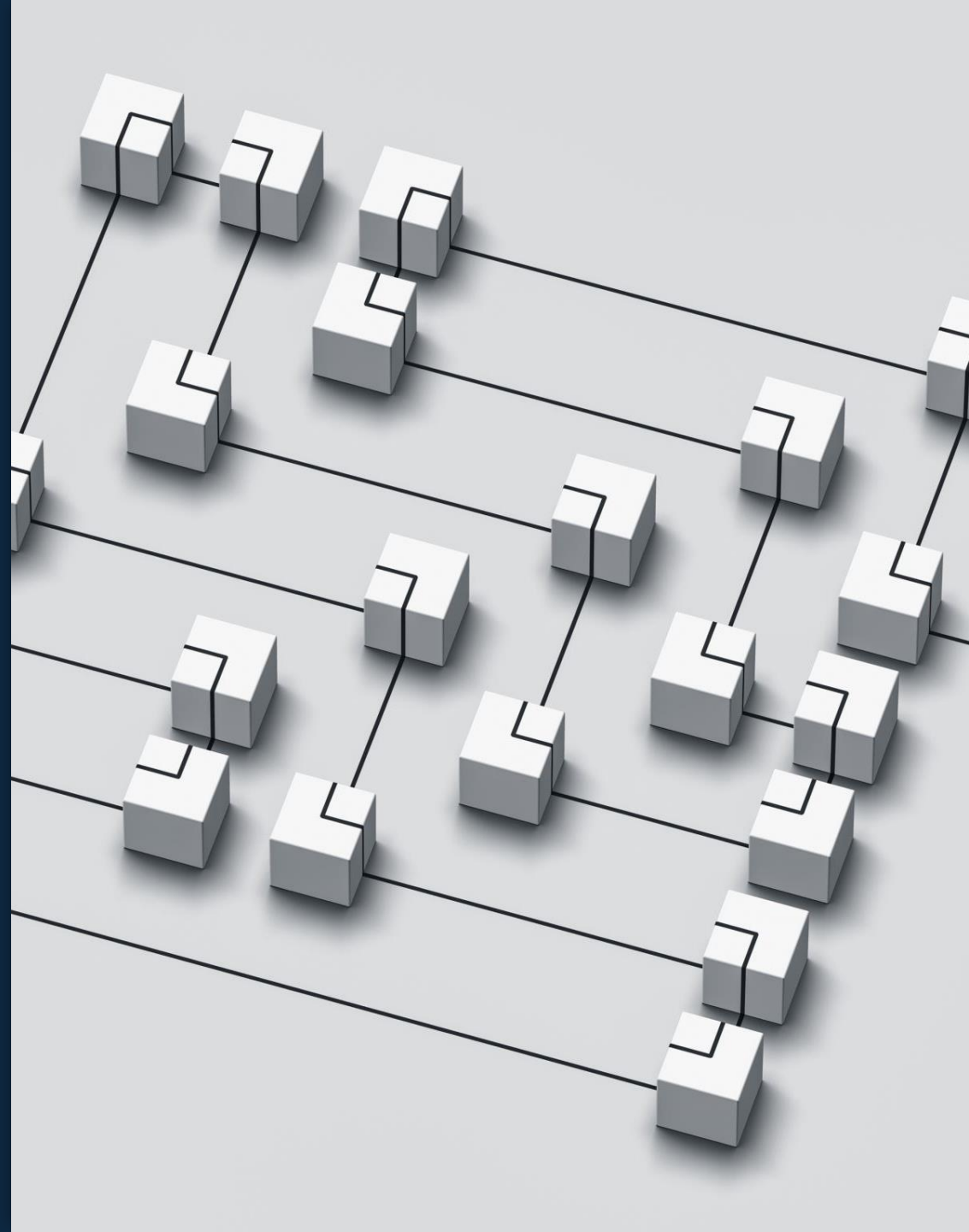
What specific role does your organization play in FlexBIT?

Fraunhofer IFF leads the coordination of FlexBIT, ensuring effective collaboration among partners and successful implementation of project goals. We are also responsible for developing the digital infrastructure and predictive analytics needed to optimize flexibility management and energy flow across multiple sectors.



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

Through FlexBIT, we aim to deliver a unified digital platform for flexibility aggregation, capable of supporting both horizontal and vertical energy exchanges. A key milestone in Germany will be the creation of an industrial energy community, where two industrial partners will exchange energy locally. Additionally, this community will enable energy sustainability tracking for production processes, establishing a pioneering example in the sector. These advancements will empower energy communities, optimize resource utilization, and drive innovation in energy systems management.



Why is FlexBIT important for Europe's energy transition?

FlexBIT addresses critical challenges of renewable integration, energy storage, and flexibility management. By delivering scalable and interoperable solutions, the project paves the way for a resilient, cost-effective, and carbon-neutral energy system, making it a cornerstone of Europe's clean energy transformation.

