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Collaborative Data Space for distributed intelligence supporting energy performance Management

Project Background

Federated machine learning techniques can unlock value from “untapped” data for energy savings.

Problem statement

Industrial energy performance data is underused, fragmented, and difficult to share securely.

Research Methodologies

A co-design approach with open-source technical solutions and piloting to validate scaling potential.

Research Outcomes

1. Secure **open collaborative data space** facilitating an ecosystem of shared stakeholder intelligence.
2. **Advanced machine learning** techniques to build robust models that enrich current energy analytic services with added intelligence.

Policy Recommendations

Policy insight	
 1. Cross-organisational data sharing	Support industrial data spaces with shared governance, standards, privacy-preserving analytics and clear benefit-sharing rules.
 2. Technology adoption	Enable adoption through demonstrators, sandboxes, skills programmes and value-assessment tools that prove business value, reduce risk and build industrial confidence.
 3. Compliance and assurance	Move from manual reporting to automated, data-driven assurance using trusted, auditable and interoperable data spaces.
 Overall policy message: create trusted, interoperable and adoption-focused data ecosystems that make collaboration, innovation and compliance easier for industry.	