



Solution package 3:

Deployment of energy-efficient buildings integrating onsite RES and storage

Heritage refurbishment - from building use to technical solutions

Session Summary

This Community of Practice session focused on the rehabilitation of heritage areas and buildings as catalysts for urban transformation. Participants explored holistic strategies that combine cultural preservation, adaptive reuse, and sustainable urban integration. Inspirational international cases such as Zollverein Park (Essen), the High Line (New York), and Fondazione Prada (Milan) illustrated how heritage sites can be successfully repurposed. The session also included a collaborative workshop where cities presented their own heritage buildings and discussed opportunities, challenges, and potential strategies for refurbishment.

Common Challenges

- **Balancing the preservation of historical identity with modern energy performance and usability**, particularly in large industrial buildings with high demands.
- **Managing technical barriers** such as façade insulation **without altering appearance, structural integrity, safe construction processes, and compatibility of old and new materials**.
- **Overcoming systemic obstacles** including fragmented ownership, strict heritage protection criteria, and depollution requirements in brownfield sites.
- **Securing financial and societal support**, as high upfront costs, limited funding schemes, and community acceptance remain major hurdles for implementation.

Main Takeaways

- Heritage refurbishment requires a **holistic approach that integrates cultural, social, technical, and economic perspectives** to achieve long-term impact.
- **Adaptive reuse, mixed-use functions, and vegetalisation** can revitalize heritage sites and strengthen their connection with communities.
- Successful projects demonstrate that **stakeholder engagement, co-creation processes, and innovative financing models** are decisive in overcoming complexity and unlocking potential.
- Developing **master plans and clear legal-financial frameworks** helps align depollution, protection rules, and urban integration, making interventions more feasible and scalable.

Quote

"Heritage refurbishment is an opportunity to re-imagine the cities, breathing new life into obsolete industrial areas. The path to success is based on the implementation of integrative strategies such as rethinking building use change, paying attention to urban integration and engaging stakeholders to drive the project forward sustainably. Greening, highlighting an iconic building to capture attention, and applying circular economy models will drive large-scale solutions." - **Jonatan Viejo Rodríguez, CARTIF**

