

SBE2027 Tianjin — Workflow Test

23 August 2027 - 26 August 2027

Scientific Programme

Large-Scale Retrofit Planning and Urban Carbon Transition

district, campus, and city-scale strategies or modelling approaches for upgrading existing building stocks and infrastructure.

Individual Building Retrofit Modeling and Performance Simulation

energy, carbon, comfort, daylight, indoor air quality, and life-cycle assessment for building-level retrofit decisions.

Digital Twins, AI, and Data-Driven Retrofit Decision Support Tools

monitoring, calibration, optimization, and scenario modeling for built-environment transformation.

Historic Building Conservation and Low-Carbon Renewal

heritage-sensitive retrofit methods that balance cultural continuity, performance improvement, and community value.

Rural/Village Revitalization and Vernacular Sustainability

low-carbon renewal of rural settlements, village infrastructure, vernacular buildings, and community-led retrofit practices.

City-Region Governance, Policy, and Finance for Retrofitting

regulatory frameworks, incentives, public-private partnerships, retrofit business models, and implementation pathways.

Circular Materials, Construction Waste, and Low-Carbon Retrofit Technologies

reuse, repair, prefabrication, material circularity, and low-carbon construction systems for retrofit projects.

Building Adaption and Reuse Design

structural, architectural, internal conditions design for retrofit, as well as different strategies - e.g. change of use, climate adaptation, vertical extension