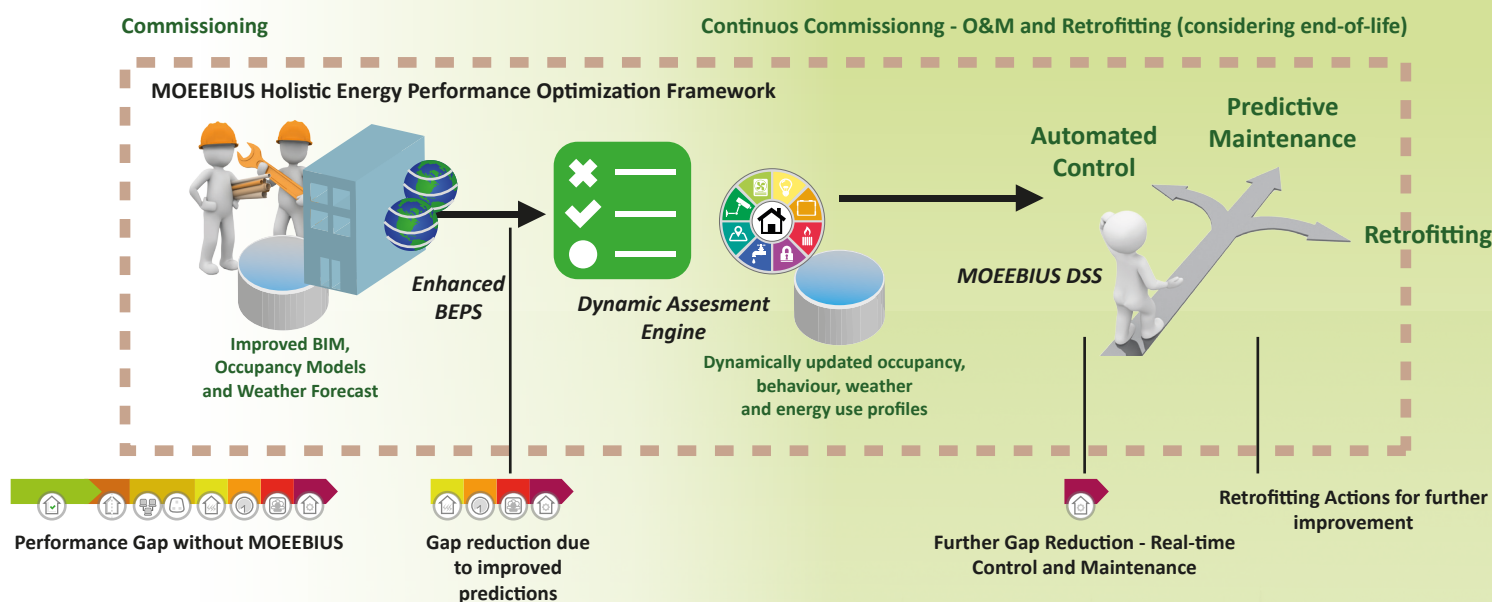


Modelling Optimization of Energy Efficiency in Buildings for Urban Sustainability



MOEEBIUS introduces a Holistic Energy Performance Optimization Framework that enhances current modelling approaches and delivers innovative simulation tools which deeply grasp and describe real-life building operation complexities in accurate simulation predictions that significantly reduce the “performance gap” and enhance multi-fold, continuous optimization of building energy performance as a means to further mitigate and reduce the identified “performance gap” in real-time or through retrofitting.



MOEEBIUS Solution will enable

- Improved Building Energy Performance Assessment
- Precise allocation of detailed performance contributions of critical building components
- Real-time building performance optimization including advanced simulation-based control and real-time self-diagnosis features
- Optimized retrofitting decision making on the basis of improved and accurate LCA/ LCC-based performance predictions
- Real-time peak-load management optimization at the district level

www.moeebius.eu



MOEEBIUS is the answer to the challenges and factors that hinder the capabilities of current simulation and control frameworks to provide highly accurate predictions and fine-grained optimization that address the complexities induced during buildings' and districts' real time operation. In order to properly address the aforementioned challenges, MOEEBIUS introduces and focuses on the successful realization of a blend of technical, social, environmental and business objectives, which address and reflect the project's multi-fold approach. These are:

- Advancing the capabilities of current Building and District Energy Performance Simulation Tools, to enable accurate predictions through addressing current modelling and measurement & verification inefficiencies
- Further optimizing the performance gap through human-centric fine grained control, predictive maintenance and retrofitting at building and district level
- Enabling the efficient Integration of distributed and intermittent energy resources into the Smart Grid and enhancing reliability and security of energy supply
- Facilitate Energy Performance Contracting penetration in EU Energy Services Markets through the provision of a replicable and easily transferable framework
- Introducing Novel ESCO Business Models and New Energy Market Roles enabling the transition to demand-driven Smart Grid Services through Demand Side Aggregators

Join MOEEBIUS Living Lab

The MOEEBIUS Living Lab is an environment for experience sharing and exchange towards user-driven open innovation of products and services.

ESCOs, Maintenance
Companies, Facility
Managers,
Aggregators,
Scientists, European
Cleanweb Start-up,
SME, Building
Occupants

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exploitation and
replication of
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after its official
completion

Share your opinion
and expertise
throughout the
whole project
implementation
duration to
optimize all project
results

MOEEBIUS Partners



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