Thematic Group on Sustainable Digital Transformation in Buildings and Urban Energy

Update on the work of the U4SSC Thematic Groups

Presented by:
Victoria Papp, Co-Leader of the Thematic Group on Sustainable Digital Transformation in Buildings and Urban Energy
31 October 2025

U4SSC

Thematic Group on Sustainable Digital Transformation in Buildings and Urban Energy

Thematic Group Leaders

Co-Leaders: Gulnara Roll (UNEP) and Victoria Papp (BOMA)

Thematic Group Scope

The Thematic Group on Sustainable Digital Transformation in Buildings aims to address this need by exploring the integration of digital technologies with sustainable building practices.

Thematic Group Topic Areas

This Thematic Group will explore emerging solutions for digital transformation in buildings, highlight important case examples and studies.

Why we initiated the Thematic Groups

The Thematic Group on Sustainable Digital Transformation in Buildings and Urban Energy was launched to respond to this critical intersection of sustainability, technology, and the built environment.

02 Provide a global platform for experts to share knowledge, co-develop deliverables and guiding frameworks, and support buildings and cities

04 Align with the broader SDG framework, especially SDG 11 (Sustainable Cities), SDG 7 (Clean Energy), and SDG 13 (Climate Action).

01 Bridge the gap between sustainability goals and the practical application of digital innovation in buildings.

03 Highlight actionable, people-centered strategies that support smarter, greener, and more resilient urban energy systems through buildings.

Ongoing Working Groups and Deliverables

Working Group 1

1

Emerging Solutions for Buildings

Leader: Victoria Papp (BOMA)

Ongoing

Working Group 1 was established as the first core working group within this thematic effort because buildings are the most immediate and scalable opportunity for impact.

Working Group 2

2

Guiding Principles for Buildings

Leader: Gulnara Roll (UNEP)

Kick off Pending

Working Group 2 will build off of the findings from Working Group 1 and provide concrete guiding principles for buildings looking to drive sustainable digital transformation.

Ongoing Working Groups and Deliverables

Working Group 1

1

Emerging Solutions for Buildings

Leader: Victoria Papp (BOMA)

Ongoing

Scope

This working group will:

- Provide a snapshot of where digital transformation stands today in buildings
- Highlight promising and impactful tools, platforms, and technologies
- Feature real-world examples from around the globe
- Offer insight into how digital tools are reshaping sustainability outcomes
- Connect these insights with broader energy and climate goals

Ultimately, WG1 will contribute to a broader international conversation on how digital transformation can accelerate the decarbonization of buildings, improve resilience, and ensure that technological advancements contribute to inclusive, sustainable development.

Ongoing Working Groups and Deliverables

Working Group 1

1

Emerging Solutions for Buildings

Leader: Victoria Papp (BOMA)

Ongoing

Working Document Framework

Framing Digital Transformation in Buildings

What's happening Now

Methodology

Case studies

Enabling Conditions

**Emerging Solutions for Buildings:
Real-World Digital Transformation in Action**

A report by U4SSC Working Group 1 on Sustainable Digital Transformation in Buildings and Urban Energy

1. **Executive Summary**

Section overview:
- A high-level overview of the key findings, opportunities, and recommendations.
- Emphasis on the role of digital transformation in decarbonizing the building sector.

(to be written at the end)

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Ongoing Working Groups and Deliverables
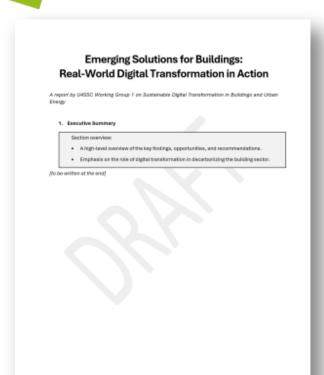
Working Group 1

| 1 |

Emerging Solutions for Buildings

Leader: Victoria Papp (BOMA)

Ongoing

Working Document Outline

- Introduction – Why buildings and digital transformation matter now

- Framing Digital Transformation in Buildings – Definitions, trends

- What's Happening Now – A scan of current technologies, practices, and adoption

- Case Studies – Real-world examples from cities, building operators, and technology providers

- Enabling Conditions – What helps these solutions succeed? (e.g. policy, procurement, partnerships)

- Challenges & Gaps – What's holding digital innovation back in buildings?

- Takeaways & Next Steps – Lessons for cities, governments, and the private sector

Emerging Solutions for Buildings: Real-World Digital Transformation in Action

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Ongoing Working Groups and Deliverables

Working Group 1

1

Emerging Solutions
for Buildings

Leader: Victoria Papp
(BOMA)

Ongoing

Status and Next Steps

WG1 is currently building out the case studies section of the report and will continue its work into the new year. The group is ensuring that the selected examples are geographically diverse, representative, and highlight scalable and practical technologies. Efforts are also being made to include a variety of asset types. WG1 will continue working diligently into the new year, with a timeline to present a final draft by summer.

Upcoming Meetings in 2025 and 2026

- 11 December 2025, 16:00 – 17:00 hours, Geneva time

- 22 January 2026 16:00 – 17:00 hours, Geneva time

- 19 March 2026, 16:00 – 17:00 hours, Geneva time

- 21 May 2026, 16:00 – 17:00 hours, Geneva time

- 16 July 2026, 16:00 – 17:00 hours, Geneva time

For more information, please contact:

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U4SSC website:

https://u4ssc.itu.int/

Thank you!