# SUSTAINABLE CITIES

"Cities are the cradle of economies that can reduce the climate impact of business: many of the solutions for climate change mitigation and adaptation, circular economy, renewable energy production, energy saving, and nature-based solutions can be designed, adapted and deployed at the local level."

*Workstream 8 cities report for the High Level Forum – December 2023*

## MAIN TECHNICAL COMMITTEES ON SUSTAINABLE CITIES STANDARDIZATION

### - International level -

### ➢ ISO/TC 268 – Sustainable cities and communities

| Standards | 50 | Projects | 19 | National delegates | 2 |
|---|---|---|---|---|---|

**Scope**

Standardization in the field of Sustainable Cities and Communities will include the development of requirements, frameworks, guidance and supporting techniques and tools related to the achievement of sustainable development considering smartness and resilience, to help all Cities and Communities and their interested parties in both rural and urban areas become more sustainable.

Note: TC 268 will contribute to the UN Sustainable Development Goals through its standardization work.

The proposed series of International Standards will encourage the development and implementation of holistic and integrated approaches to sustainable development and sustainability.

**2 Subcommittees**

| | | | |
|---|---|---|---|
| SC 1 | Smart community infrastructures | SC 2 | Sustainable mobility and transportation |

**10 Working Groups**

| | | | |
|---|---|---|---|
| AHG 1 | PWI Harbour Cities | WG 1 | Management System Standards |
| CAG 1 | Chair's Advisory Group | WG 2 | City indicators |
| TG 1 | Awareness-raising, communication and promotion | WG 3 | City anatomy and sustainability terms |
| TG 2 | Collection of cities good practices and needs | WG 4 | Smart processes and operating models for sustainable communities |
| TG 3 | Supporting the strategic positioning of ISO/TC 268 | WG 5 | Risk Finance |

### - European level -

### ➢ CEN/TC 465 – Sustainable Cities and Communities

| Standards | 1 | Projects | 3 | National delegates | 0 |
|---|---|---|---|---|---|

**Scope**

Standardization in the field of Sustainable Cities and Communities, covering the development of requirements, frameworks, guidance and supporting tools and techniques. The proposed standardization plan will be developed to assist cities and community decision making, and support their implementation of sustainability and sustainable development. Standardization will focus on the development of a holistic and integrated approach in response to the needs of European Cities and Communities in both rural and urban areas. (…)

**3 Working Groups**

| | | | |
|---|---|---|---|
| WG 1 | Nature-Based Solutions | WG 3 | Territorial Resilience Development |
| WG 2 | Services to citizens | | |

# MAIN STANDARDS ON SUSTAINABLE CITIES

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|---|---|
| **Framework for integration and operation of smart community infrastructures** | |
| ISO 37155-1:2020 | Part 1: Recommendations for considering opportunities and challenges from interactions in smart community infrastructures from relevant aspects through the life cycle |
| ISO 37155-2:2021 | Part 2: Holistic approach and the strategy for development, operation and maintenance of smart community infrastructures |
| **Smart community infrastructures** | |
| ISO/TR 6030:2022 | Disaster risk reduction – Survey results and gap analysis |
| ISO/TR 37150:2014 | Review of existing activities relevant to metrics |
| ISO/TS 37151:2015 | Principles and requirements for performance metrics |
| ISO/TR 37152:2016 | Common framework for development and operation |
| ISO 37153:2017 | Maturity model for assessment and improvement |
| ISO 37156:2020 | Guidelines on data exchange and sharing for smart community infrastructures |
| ISO 37166:2022 | Urban data integration framework for smart city planning (SCP) |
| ISO 37170:2022 | Data framework for infrastructure governance based on digital technology in smart cities |
| ISO/TR 37171:2020 | Report of pilot testing on the application of ISO smart community infrastructures standards |
| ISO/TS 37172:2022 | Data exchange and sharing for community infrastructures based on geographic information |
| ISO 37173:2023 | Guidance for the development of smart building information systems |
| ISO 37174:2024 | Disaster risk reduction — Guidance for implementing seismometer systems |
| ISO/TR 37178:2023 | Data exchange and sharing for the lamppost network in smart community |
| **Sustainable mobility and transportation** | |
| ISO/TR 16497-1:2024 | Sustainable mobility services — Part 1: Use cases |
| ISO 37154:2017 | Best practice guidelines for transportation |
| ISO 37157:2018 | Smart transportation for compact cities |
| ISO 37158:2019 | Smart transportation using battery-powered buses for passenger services |
| ISO 37159:2019 | Smart transportation for rapid transit in and between large city zones and their surrounding areas |
| ISO 37160:2020 | Measurement methods for the quality of thermal power infrastructure and requirements for plant operations and management |
| ISO 37161:2020 | Guidance on smart transportation for energy saving in transportation services |
| ISO 37162:2023 | Smart transportation for newly developing areas |
| ISO 37163:2020 | Smart transportation for parking lot allocation in cities |
| ISO 37164:2021 | Smart transportation using fuel cell light rail transit (FC-LRT) |
| ISO 37165:2020 | Guidance on smart transportation with the use of digitally processed payment (d-payment) |
| ISO 37167:2021 | Smart transportation for energy saving operation by intentionally driving slowly |
| ISO 37168:2022 | Guidance on smart transportation by Electric, Connected and Autonomous Vehicles (eCAVs) and its application to on-demand responsive passenger services with shared vehicles |
| ISO 37169:2021 | Smart transportation by run-through train/bus operation in/between cities |
| ISO 37180:2021 | Guidance on smart transportation with QR code identification and authentification in transportation and its related or additional services |
| ISO 37181:2022 | Smart transportation by autonomous vehicles on public roads |
| ISO 37182:2022 | Smart transportation for fuel efficiency and pollution emission reduction in bus transportation services |
| ISO 37183:2023 | Smart transportation by facial recognition payment (f-payment) |
| ISO 37184:2023 | Framework for transportation services by providing meshes for 5G communication |
| **Management system for sustainable development** | |
| EN ISO 37101:2016 | Requirements with guidance for use |
| ISO 37101:2016/Amd 1:2024 | Requirements with guidance for use — Amendment 1: Climate action changes |
| **Vocabulary – Recommendations – Models – Indicators** | |
| ISO 37100:2016 | Vocabulary |
| ISO 37104:2019 | Transforming our cities — Guidance for practical local implementation of ISO 37101 |
| ISO 37105:2019 | Descriptive framework for cities and communities |
| ISO 37106:2021 | Guidance on establishing smart city operating models for sustainable communities |
| ISO/TS 37107:2019 | Maturity model for smart sustainable communities |
| ISO 37108:2022 | Business districts — Guidance for practical local implementation of ISO 37101 |
| ISO 37109:2023 | Recommendations and requirements for project developers — Meeting ISO 37101 framework principles |
| ISO 37110:2022 | Management requirements and recommendations for open data for smart cities and communities — Overview and general principles |
| ISO/TR 37112:2024 | Case studies in how smart city operating models support an effective public-health emergency response |
| ISO 37120:2018 | Indicators for city services and quality of life |
| ISO/TR 37121:2017 | Inventory of existing guidelines and approaches on sustainable development and resilience in cities |
| ISO 37122:2019 | Indicators for smart cities |
| ISO 37123:2019 | Indicators for resilient cities |
| ISO 37124:2024 | Guidance on the use of ISO 37120, ISO 37122 and ISO 37123 |