



BUSINESS PLAN
CEN/TC 465
Sustainable Cities and Communities

PRELIMINARY REMARK

Technical Committee 465 Sustainable Cities and Communities (CEN/TC 465) was established in 2020. After validating its title and scope, the members of the technical committee developed the first version of its business plan, which is available below.

An in-depth discussion took place within the technical committee and a dedicated ad hoc group. Comments were collected from members and an updated version has been produced based on the comments received.

CEN/TC 465 members are aware that as a result of the establishment of TC 465 there are many related processes which are also being created. This first edition of the TC 465 Business Plan should be considered as capturing the current position in 2020/2021.

The Business Plan is a living document which is intended to be revised every year. Hence, the first edition provides a temporary framework to progress the work programme based on the agreed title and scope. The second edition of the TC 465 Business Plan will reflect the further development of both the relevant policy landscape and the CEN/TC 465 Work Programme which is currently under development.

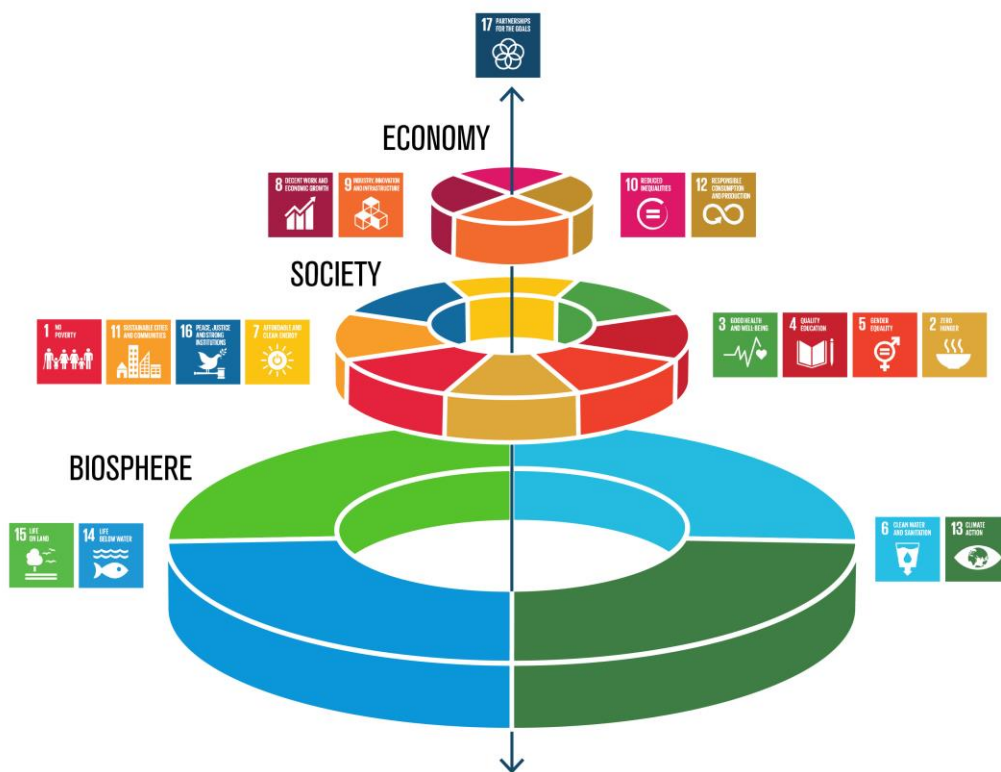
1 BUSINESS ENVIRONMENT OF THE CEN/TC 465

1.1 Description of the Business Environment

Standardisation in the field of ‘Sustainable Cities & Communities’

In September 2015 the United Nations General Assembly approved the 17 Sustainable Development Goals (SDGs) including Goal 11, which refers to cities and urban areas. The SDGs take the logic and spirit of the Millennium Development Goals (MDGs) forward to the universal UN 2030 Agenda for Sustainable Development. The goals apply to all UN member states and take a comprehensive perspective on international development and sustaining human life on the planet. The SDGs include new themes and take an approach that views the economies and societies as embedded parts of the biosphere rather than separate and competing pillars, implying that in the transition towards sustainability the economy serves society so that it evolves within the planetary boundaries.

Figure 1 depicts the SDG approach and the way in which economies and societies are embedded components of the biosphere.



Graphics by Jerker Lukman/Azote

Figure 1 The SDG ‘Wedding Cake’
 (credit: Azote Images for Stockholm Resilience Centre, Stockholm University¹)

¹ <https://www.stockholmresilience.org/images/18.36c25848153d54bdba33ec9b/1465905797608/sdgs-food-azote.jpg>

The European Green Deal², adopted in December 2019, puts the SDGs at the heart of EU policy aiming to “transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050, and where economic growth is decoupled from resource use”. It is an integral part of the ‘Green Deal’ to implement the UN 2030 Agenda and the sustainable development goals and to put Europe firmly on a path of sustainable and inclusive growth that aims to protect, conserve and enhance the EU’s natural capital, while protecting the health and well-being of citizens from environment-related risks and impacts. Figure 2 depicts the components of the European Green Deal.

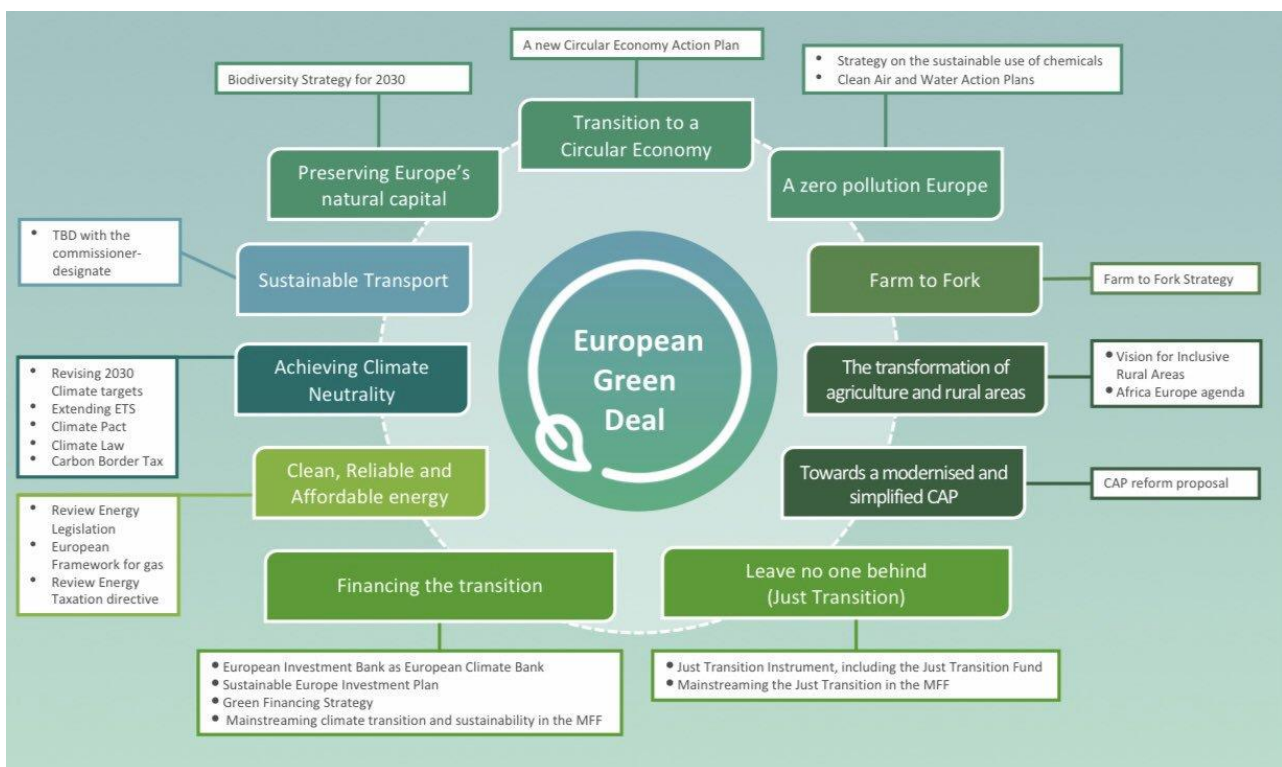


Figure 2: Components of the European Green Deal³

As a result of the need to consider 95.000 cities and towns in EU and EFTA countries who contribute 75 % of the EU’s GDP, the EU Urban Agenda (UA)⁴ states that “the success of European sustainable urban development is highly important for the economic, social and territorial cohesion of the European Union and the quality of life of its citizens.” The UA confirms the relevant role of sustainable cities and communities that will implement the sustainable development goals in programmes, projects and solutions at the level closest to people to achieve a sustainable Europe. The UA is the mechanism to attain the UN Sustainable Development Goals (SDGs) outlined in the UN 2030 Agenda for Sustainable Development, adopted by the UN General Assembly.

² https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

³ <https://www.compostnetwork.info/eu-green-deal/>

⁴ https://ec.europa.eu/regional_policy/en/policy/themes/urban-development/agenda/

The EU Green Deal to be successful, will need to build on both horizontal and vertical integration across all levels of government. In response to the European Green Deal, the UN SDGs and the Paris Agreement on climate change, cities and communities engaged in the Aalborg Process of European Sustainable Cities & Towns, in their 2020 'Mannheim Message'⁵⁶. Cities and communities have committed to actively support the European Green Deal by developing and implementing Local Green Deals designed in cooperation with their citizens and key stakeholders, including business, industry, research and innovation sectors. The Mannheim Message delivers a call to local government to create a strategy aligned with the goals, priorities and principles of the European Green Deal and the New Leipzig Charter. The aim is to accelerate the transformation of our societies to becoming carbon neutral, sustainable and inclusive. Five core systemic changes and nine policy shifts are articulated. This is an integrated approach as 'engine' and as a concept that takes into account all relevant interests and actors simultaneously and fairly.

The transformation to create sustainable cities and communities that ensure economic, social and environmental progress is a major challenge for Europe. This is intended to be a comprehensive societal transformation including social, cultural, economic and technological changes that will deeply affect urban and rural communities. Cities and communities, decision makers, stakeholders and citizens are asked to design and shape this transformation. However, Europe has still not recovered from the financial and economic crisis, countries are challenged by unemployment, a growing divide between the rich and the poor, and are also dealing with the COVID-19 pandemic. In addition, Europe needs to resolve regional conflicts in neighbouring regions, issues related to an economic and social divide and increased migration towards Europe which is one of the consequences of the impact of these challenges.

Against this background, many European cities and communities are undergoing structural societal and socio-economic transformations, for example from the old industrial and coal-intensive regions to post-industrial including in central as well in eastern Europe. Also, some cities and communities have already embarked on digitalisation programmes and have developed Smart City Strategies to foster innovation and economic development and increase (resource) efficiency and the effectiveness of infrastructure and services.

Climate action is at the heart of the European Green Deal which includes an ambitious package of measures ranging from cutting greenhouse gas emissions to investing in cutting-edge research and innovation through to preserving Europe's natural environment. The European Climate Pact aims to engage citizens and communities to participate in climate action and build a greener Europe. The scientific evidence has demonstrated the urgency of a response due to the intensification of climate change⁷ and the increasing biodiversity loss⁸. Innovative solutions, including smart city and nature-based solutions, may serve as an entry point for embarking on broader sustainable urban development programmes. However, the transformation to sustainability requires out-of-the-box thinking and the use of holistic innovative solutions which are cross-sectoral, potentially nature based, and/or digital or agent based.

The new Leipzig Charter states digitalisation is a major transformative, cross-sectoral trend affecting all dimensions of sustainable urban development that offers an opportunity for urban

⁵ <https://conferences.sustainablecities.eu/mannheim2020/mannheim-message/>

⁶ https://sustainablecities.eu/fileadmin/repository/Basque_Declaration/BD_May_Update/Basque-Declaration-ENGLISH-www.pdf

⁷ <https://www.ipcc.ch/site/assets/uploads/sites/2/2018/12/SPM-for-cities.pdf>

⁸ <https://ipbes.net/o4-supporting-policy>

transformation. Digital solutions can deliver innovative and high-quality services to the public and businesses. These include smart urban mobility, energy efficiency, sustainable housing, public services, retail, supply of daily goods and civic led governance. At the same time digitalisation can trigger a further spatial and social divide with risks to the protection of privacy and security. Digitalisation needs to be shaped in an environmentally sustainable, inclusive and fair manner. With a broader perspective, European digital sovereignty is key to the future competitiveness of the EU. Cities, with their ability to scale up digital solutions and adapt them to local conditions can significantly contribute to the goal of sustainable urban development. Digitalisation needs to ensure that approaches which are used are replicable to different contexts, drive technological, socio-economic and socio-cultural transformation and specifically designed for use by all cities and communities. Citizens and wider stakeholders are interested in achieving the sustainable development of urban and rural areas. To support this ambition, standards driven by user-needs can help rapid market uptake and adoption, the implementation of Europe's sustainability ambitions and policy goals, and the positioning of Europe as a global leader in local sustainability solutions.

CEN Technical Committee 465 is aware of the urgent need to underpin transformation towards sustainable cities and communities. Respecting that political decision making and planning is the sole responsibility of local government and contextualised by legislative and governance frameworks this business plan has been developed to produce standards and guidance to assist cities and community decision making and support the 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 applying a place-based, multi-level and participatory approach. The Technical Committee will create standards covering the development of requirements, frameworks, guidance and supporting tools and techniques.

CEN/TC 465 is aware of the need to build a framework architecture as a reference for policies, investigating the concept of the city as a "system of systems" that integrates social, digital, physical and natural systems. The majority of the activities and investments that take place in a city are outside of local government control. This means that cities need a broad coalition of stakeholders committed to the policy objectives, including public-private-people partnerships, that will enable the low carbon cities of the future. All citizens, institutions, and stakeholders should be able to participate in the identification of needs, the planning and subsequent implementation of relevant activities in order to design suitable public policies such as the Treaty of Maastricht, Leipzig Charter, Agenda 2030, Urban Agenda. Urban technologies, digital technologies, bottom-up, co-creation processes, and social cohesion can enable people to act as co-creators, co-managers, and as 'co-owners' of liveable and lively cities enabling civic participation.

The Technical Committee will establish the UN 2030 Agenda, including the SDG's, as its guiding framework respecting their integrated and indivisible character. This will involve the balancing of the three dimensions of sustainable development of cities and communities namely the economic, social and environmental as a benchmark for the Technical Committees standardization work.

Consequently, the Technical Committee will focus on specific European needs to:

- oversee standards to support cities and communities towards sustainability
- address the specific needs of European cities and communities in attaining relevant policies
- align the Technical Committee's architecture, structures and procedures with identified key global/European policies for terminology, objectives, principles, timelines, review mechanisms.

Additionally, embedded aspects related to management, governance, indicators, reporting, evaluation/verification, infrastructure, and innovation aspects will also be used.

CEN/TC 465 as defined by its scope and work programme is dedicated to support the implementation of Europe’s sustainability ambitions and policies, and the position of Europe as a global leader in local sustainability solutions which implement the EU Green Deal and the EU Urban Agenda.

The increased of quality of life through sustainable cities and communities can create significant economic and business potential. The Sustainable Europe Investment Plan⁹ is the investment pillar of the Green Deal and will mobilise investments to underpin the ambitions and plans of Europe. By 2030, at least EUR 1 trillion of private and public sustainable investments are planned to be mobilized through the EU budget and the associated instruments, such as the Just Transition Fund. The EU Multiannual Financial Framework Programme¹⁰ 2021-2027 will provide € 1,824.3 bn, including the EU Recovery Plan ‘Next Generation EU’ with € 750 bn to support Europe’s recovery post-Covid 19. In addition, this is an enabling framework for private investors and the public sector and will create and tailor support for public administrations and projects which focus on identifying, structuring and executing sustainable projects. Sustainable impact will be made visible through appropriate instruments, for example sustainability proofing and green budgeting. Figure 3 depicts the components of the Sustainable Europe Investment Plan.

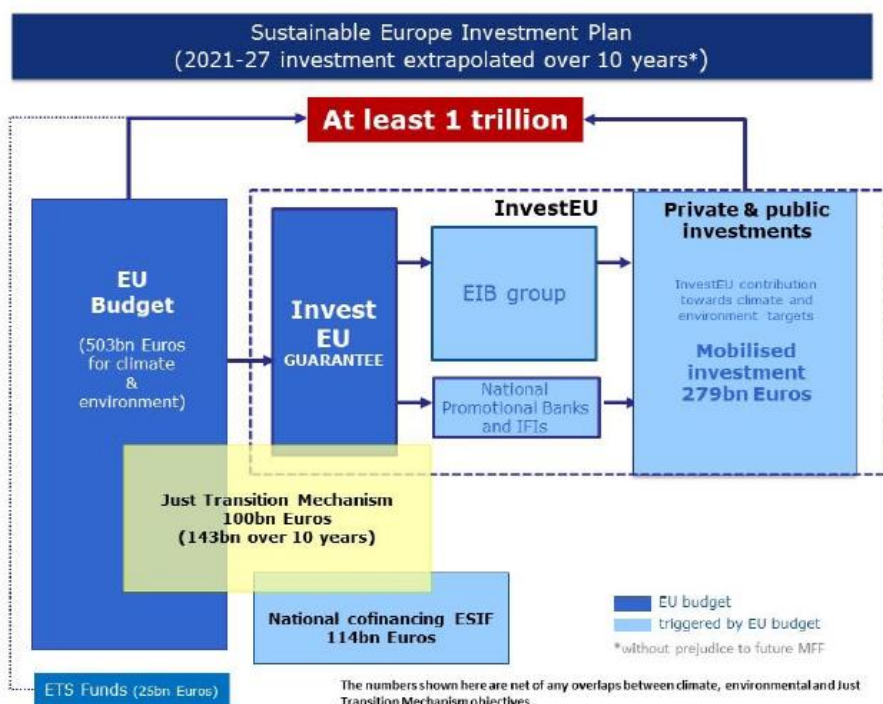


Figure 3: The Sustainable Europe Investment Plan

There is a need for a post-pandemic recovery plan and the recovery from the COVID-19 pandemic needs to go hand in hand with the delivery of climate resilient infrastructure and services. The

⁹ https://ec.europa.eu/commission/presscorner/detail/en/fs_20_48

¹⁰ <https://www.consilium.europa.eu/en/infographics/recovery-plan-mff-2021-2027/>

investment needs in the field of urban infrastructure and development have become apparent. The European Investment Bank (EIB)¹¹ estimates that the infrastructure investment needs for energy, transport, water and sanitation, and telecommunications are €688 billion per year. Additional estimates for social infrastructure estimate that the investment gap for health, education and social housing is €142 billion per year. In particular, both investment needs and opportunities arise for cities and communities. To enable post-pandemic recovery, experts suggest a resilient recovery approach¹² is needed, with a focus on public investment at a local level in public health, sustainable mobility, public transport and infrastructure for climate neutral mobility, and the digitization of public administration and schools.

Additional business opportunities are expected to arise as a result of the EU Research & Innovation Programme Horizon Europe, and investment programmes, such as the European Bank for Reconstruction and Development's Green Cities Programme.

Another challenge for this Technical Committee will be to articulate how standards can be a potential facilitator between cities, communities and their stakeholders and the articulation of this intervention to citizens through to financing structures and companies.

Whilst developing standards is focused on supporting cities and communities on their path to sustainability, the Technical Committee acknowledges that generally the stakeholders are not familiar with the standardization development process. Cities and their communities have used standards such as ISO 9000 series or ISO 14000 which were not developed for the domain. Despite usage of standards in different fields these do not address the needs of cities and communities with regard to sustainable development, climate change and other challenges comprehensively. Historically, standardization has struggled to address the needs of cities and communities, and citizens in particular.

Standardization in the field of 'sustainable cities and communities' only started in 2012 within ISO through the ISO/TC 268 committee. Globally, most of the standardization development organizations, and in particular IEC and ITU-T, have started to develop and publish standards. At European level a strategic structure has been established between CEN-CENELEC and ETSI, with the creation of a Sector Forum Smart and Sustainable Cities and Communities (SF-SSCC). As a result, a portfolio of European standards related to Sustainable Cities and Communities has not been created.

Orientations and the level of engagement for each of the CEN members is currently diverse. Some National Standards Bodies have been involved with international standardization, others are focused on national level and some are only just establishing a mirror committee. As a result, in Europe the adoption of international standards at national level and their usage varies considerably in each country.

1.2 Quantitative Indicators of the Business Environment

The Technical Committee will develop standards to assist cities and communities, support decision making, their implementation of sustainability. The desired impact would be improved outcomes, greater sustainability locally as a result of each city or community adopting standards, and adoption of standards in many, if not all cities and communities.

¹¹ [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/628245/EPRS_BRI\(2018\)628245_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/628245/EPRS_BRI(2018)628245_EN.pdf)

¹² <https://cities-today.com/global-resilient-cities-network-launches-coalition-to-drive-recovery/>

However, measuring the contribution of standards produced by the Technical Committee to a cities' or communities' sustainability, or cumulatively for all is not simple and is expected to require significant and sustained efforts to achieve.

Firstly, there is currently no coherent monitoring and reporting mechanism applied throughout Europe, which would allow for a sustainability performance monitoring in alignment with the UN SDGs, or Europe's sustainability ambitions. A comparative analysis of the sustainability performance in Europe's cities and communities before and after the introduction of standards developed by the Technical Committee (or any other body) would not be feasible.

Secondly sustainable development, and sustainability is the cumulative result of a multitude of decisions of both public and private actors on programmes, projects and actions taken by and in cities, including in Public-Private-People Partnerships (PPPP) which may or may not take standards into account. A quantitative annotation of a sustainability share of a particular standard in the development of a given city or community is conceptually impossible. In fact, it will not even be possible to state an immediate relationship between a given standard supporting sustainable development in cities and communities and the sustainability performance of the respective city or community. Even more difficult would be an annotation to Europe's sustainable development, which is contributed to by approximately 95,000 cities and municipalities.

In light of the challenge, the Technical Committee will generate operational indicators related to the business environment as part of its work-programme using the following considerations:

In response to the challenge to achieve a balance between environmental, social and economic systems, ideally in mutually supporting ways, the Technical Committee will focus on the development of a holistic and integrated approach in both functional rural and urban areas, and reflect regional interrelationships, peri-urban areas. Standards produced will provide instruments and tools that will be beneficial and support cities and communities in their approach to implement sustainable urban development processes. Ultimately this will support the quality, efficiency and effectiveness of decisions, programmes, plans and measures to attain agreed sustainability goals. The expectation of the Technical Committee is that a significant number of cities and communities will adopt the standards produced.

In order to monitor the uptake of standards it will not be sufficient to track the number of cities and communities potentially certified against a certain standard. Previous experiences with standards for example environmental management systems suggest that often, cities and communities, whilst referencing standards, for various reasons do not strive for certification. The Technical Committee will need to apply different approaches to monitor uptake, for example by collecting feedback from standards users, regardless of any certification and on the impact of the standards. The Technical Committee will strive for collecting evidence from cities or communities on how they are improving their sustainability performance. The evidence will be collected using the purposes of urban sustainable development as defined by ISO 37101, namely resilience, attractiveness, well-being, social cohesion, preservation and improvement of environment, responsible resource use, aligned with the main pillars of sustainable development of economic, environmental and social measures from the standards created. This could be evidenced by the sustainability reports created by cities and communities. The Technical Committee will seek partnerships with cities and communities and their associations to carry out this work, and will also consider the applicability of the European Handbook for SDG Voluntary Local Reviewers¹³.

¹³ https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118682/european_handbook_for_sdg_voluntary_local_reviews_online.pdf

The economy within sustainable development is one part of the social system and includes the use and consumption of resources, employment, meeting the needs of citizens in typically growing populations, income, and the distribution and use of products and services. The Technical Committee will undertake this role by focusing on innovative approaches to solution and service delivery, designed for use by all cities and communities, citizens and their interested parties as a means of achieving sustainable development in functional urban, rural, and peri-urban areas, with the aim of continuously improving solutions and services.

To achieve this the Technical Committee will take utilize and seek collaboration with the EU Taxonomy for Sustainable Activities¹⁴¹⁵¹⁶¹⁷, which is part of the EU's Sustainable Finance Strategy. The Taxonomy is set up as a tool to help plan and report the transition to an economy that is consistent with the EU's environmental objectives, in support of the EU Green Deal and the Sustainable Europe Investment Plan. The Taxonomy establishes a set of performance thresholds for economic activities, including those that relate to municipal services that either substantially contribute towards increased economic activity or enable increased environmental performance in other activities. These thresholds known as Technical Screening Criteria set a benchmark for activities which:

- make a substantive contribution to one of the six environmental objectives and
- do no significant harm to other five, and
- where relevant, meet minimum safeguards.

The Taxonomy applies a ratchet mechanism implying a continuous improvement and rising ambition towards the attainment of Europe's sustainability goals. In future, socio-economic goals will also be included. The Technical Committee will carefully consider the applicability of the Taxonomy as a benchmark for standardized approaches to solution and service innovations which substantially contribute to increased economic activities and the attainment of Europe's environmental objectives.

¹⁴ https://ec.europa.eu/info/publications/sustainable-finance-teg-taxonomy_en

¹⁵ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en#:~:text=Sustainable%20finance%20generally%20refers%20to,longer%2Dterm%20and%20sustainable%20activities

¹⁶ https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/20030_9-sustainable-finance-teg-final-report-taxonomy_en.pdf

¹⁷ https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/20030_9-sustainable-finance-teg-final-report-taxonomy-annexes_en.pdf

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

Standards prepared by CEN TC 465 will assist cities and communities decision-making towards sustainable development in support of Europe's contributions to the implementation of the UN SDGs, as expressed in the EU Green Deal and the EU Urban Agenda. This applied holistic and integrated approach is expected to provide multiple benefits and co-benefits for sustainable development:

- to help cities and communities provide for people's life quality and well-being in harmony with nature and within planetary boundaries by means of an innovative governance framework and intelligent, evidence-supported, transformative solutions that are mindful of nature's contribution to the well-being of people, and
- to help a liveable and inclusive Europe by underpinning the necessary ecological and digital transition¹⁸ and achieving productive, sustainable, and resilient cities and communities.

The benefits and opportunities of adopting standards for sustainable development are summarized as follows:

- provide support for increased sustainability ambitions for European cities and communities
- support the objectives of Europe's Green Deal and the UN 2030 Agenda
- provide a common understanding which includes language and terminology used for the design of structures between cities and communities and their interested parties, including political and administrative decision-makers, planners, developers, designers, operators, contractors, manufacturers of products, civil society organisations and citizens;
- facilitate the exchange of sustainable development in functional urban, rural and peri-urban areas between cities and communities, other levels of government, citizens, private sector, and research & innovation initiatives
- provide a common basis for research and innovation in sustainable development in cities and communities
- support the interoperability of digital, social and nature-based solutions in cities and communities in functional urban, rural and peri-urban areas.
- increase the efficiency of solutions and services for sustainable development in cities and communities
- facilitate the marketing and use of solutions and services to support sustainable development in cities and communities
- increase the competitiveness and efficiency of European solutions and services in sustainable development in cities and communities for example engineering companies, contractors, designers and product manufacturers in their global activities.

The overall benefits and features will result in better implementations of solutions and services towards sustainable development through:

- better knowledge
- better funding and
- better regulation, particularly for better informed programmes, plans, codes and rules established in cities and communities.

¹⁸ https://ec.europa.eu/commission/presscorner/detail/en/fs_20_425

The impacts for the pillars of policy making and implementation which are used in the EU Urban Agenda¹⁹²⁰ are described in more detail in the following table:

Impact	Description of Benefit
Better Implementation Better implementation of policy objectives (e.g., SDGs and Green Deal)	<p>For the UN SDGs and the EU Green Deal to be impactful there is a need to be operationalized for implementation in cities and communities in functional urban, rural and peri-urban areas. There is often a need for the any implementation to be integrated in a set complementary responsibilities and mandates with other levels of government. The Technical Committee will provide standards designed for use by all cities, communities and their interested parties to establish impactful sustainability programmes in accordance with their respective administrative and legislative framework. The standards will help to remove technical barriers to trade, open markets and support outscaling and upscaling of innovative approaches to solution and service delivery. The standards are a means of achieving sustainable development in functional urban, rural, and peri-urban areas, with the aim of continuously improving solutions and services</p>
Acceleration of sustainability performance of Europe and its cities and communities	<p>The ecological and digital transition as suggested by the EU Industrial strategy²¹ requires a rapid uptake of innovative approaches to solution and service delivery which support sustainable development. The Technical Committee will provide standards designed for use by all cities and communities, citizens and their interested parties as a means of achieving sustainable development in functional urban, rural, and peri-urban areas. The standards will aim to continuously improve solutions and services. The standards produced will impact sustainability both directly, by specifically addressing sustainable cities and communities along identified purposes and indirectly, as a result of the approaches to testing, products, procedures, services, terminology, management systems or auditing etc. The alignment of standards with the criteria provided by the EU Taxonomy for Sustainable Activities²² will be used to inform the Technical Committee of the achievements which are to be enabled in Europe.</p>
Improved people's life quality and well-being in harmony with nature and within planetary boundaries.	<p>Innovative, intelligent, evidence-supported, transformative solutions offer a significant opportunity for improving people's life quality and are mindful of nature's contribution to people. The Technical Committee will promote standards to support the</p>

¹⁹ <https://ec.europa.eu/futurium/en/urban-agenda-eu/what-urban-agenda-eu>

²⁰ https://ec.europa.eu/futurium/en/system/files/ged/pact-of-amsterdam_en.pdf

²¹ https://ec.europa.eu/commission/presscorner/detail/en/fs_20_425

²² https://ec.europa.eu/info/publications/sustainable-finance-teg-taxonomy_en

	<p>purposes of urban sustainable development as defined by ISO 37101 related to ‘Sustainable Cities and Communities’, namely resilience, attractiveness, well-being, social cohesion, preservation and improvement of environment, responsible resource use, aligned with the main pillars of sustainable development i.e., economic, environmental and social.</p>
<p>More liveable, inclusive and prosperous Europe and acceleration of Europe’s sustainability ambitions</p>	<p>Europe’s sustainability will be delivered by cities and communities, this is the level closest to people. Standards produced by the Technical Committee will underpin the Europe’s ecological and digital transition through productive, sustainable, gender-equal²³ and resilient cities and communities. The Technical Committee will apply a needs driven approach to standards development, including the development of requirements, frameworks, guidance, supporting tools and techniques. This needs driven approach will underpin cities’ and communities’ sustainability ambitions and help the rapid market uptake and acceleration of Europe’s sustainability ambitions using a PPPP approach.</p>
<p>Europe positioned as a global leader in local sustainability solutions.</p>	<p>Europe’s leading position in the ecological and digital transition will be demonstrated by a broad uptake of innovative and interoperable sustainability solutions, digital, societal or nature based. The Technical Committee will apply a needs driven approach to standard development, including the development of requirements, frameworks, guidance and supporting tools and techniques to accelerate the rapid market uptake and adoption of these solutions in cities and communities.</p>
<p>Better Knowledge</p>	
<p>More targeted R&I</p>	<p>Research and innovation approaches are an important means of creating innovative solutions for sustainable development of cities and communities. Often, however, research follows the inherent interest of the research organisation, rather than the practical needs of cities and communities resulting in the creation of barriers to innovative solutions entering the market. The Technical Committee will apply a need driven approach to standards development, including the development of requirements, frameworks, guidance, supporting tools and techniques using research to understand user needs and drive innovation to accelerate the rapid market uptake and adoption of solutions and services.</p>
<p>More targeted solutions</p>	<p>Targeted solutions and services are important means to create innovative solutions towards sustainable development of cities and communities. Often, however, solutions and services are not designed to take into account the actual needs of cities, communities or citizens. The Technical Committee will apply a needs driven approach to standard development, including the development of requirements, frameworks, guidance, supporting tools and techniques to accelerate the rapid market uptake and adoption of solutions and services. The Technical</p>

²³ https://ec.europa.eu/info/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en

	<p>Committee will support the introduction of innovative approaches to solutions and service delivery. The needs driven approach is designed for use by all cities and communities, citizens and their interested parties as a means of achieving the sustainable development in functional urban, rural and peri-urban areas, with the intention of continuously improving solutions and services.</p>
<p>Better informed decision-making in cities and community decision making, and their implementation of sustainability and sustainable development</p>	<p>Impactful sustainability programmes in cities and communities require reliable references to solution and service delivery as a means of achieving the sustainability using a holistic and integrated approach. Often, however, information and references to selection and application of solutions and services are missing, scattered or not in line with the practical needs of cities and communities. Additionally, the complexities of sustainable development are not always understood and do not always use the most appropriate approaches. The Technical Committee will apply an integrated approach based on ISO 37101 to support the responsibilities of European cities and communities in functional urban, rural and peri-urban areas, within their regional and national planning and governance. The creation of this framework is intended to focus on the continuous improvement of solutions and services.</p>
<p>Better Financing²⁴</p>	
<p>Better market integration of sustainability innovation</p>	<p>Innovative solutions and services, provided through utilities and private sector and including PPPP, supporting sustainability and sustainable development in cities and communities need a reliable framework and reduced barriers. The Technical Committee will apply an integrated approach based on ISO 37101 in response to the needs of European cities and communities in functional urban, rural and peri-urban areas with the aim of continuously improving solutions and services.</p>
<p>Improved impact of investments</p>	<p>Impactful sustainable financing and investment needs a reliable and recognized management framework to allow for the identification of investment priorities in accordance with agreed sustainability ambitions and underpinned by a reliable and targeted verification and reporting scheme. The Technical Committee will apply an integrated approach based on ISO 37101 in response to the needs of European cities and communities in in functional urban, rural and peri-urban areas with the aim of continuously improving solutions and services. The approach will support cities and communities in their decision-making to establish sustainability ambitions, development priorities and the monitoring and reporting of sustainability achievements and support the relationship with the public and private sector, including through PPPP, to release their full innovation capacity.</p>
<p>Better Regulation²⁵</p>	

²⁴ <https://ec.europa.eu/futurium/en/urban-agenda-eu/what-urban-agenda-eu>

Increase coherence and integration	<p>The Technical Committee will promote standards supporting the mainstreaming of sustainability and sustainable development in cities' and communities' processes, programmes, plans and codes, their integration within regional and national planning and governance framework, and the supportive vertical collaboration between all levels of government. This will support the achievement of sustainability ambitions efficiently, without imposing unnecessary regulatory burdens on businesses, citizens or public administrations.</p>
Increased transparency in decision-making	<p>The Technical Committee will apply an integrated approach based on ISO 37101 with the aim of continuously improving solutions and services. This approach will support cities and communities in their open and transparent decision making to establish sustainability ambitions, development priorities and the monitoring and reporting of sustainability achievements based on stakeholder engagement.</p>
Improved Harmonisation	<p>The Technical Committee will promote standards supporting harmonisation across Europe to reduce barriers to trade for solutions and services that reflect cities and communities needs, practices and responsibilities.</p>

²⁵ https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how_en

3 PARTICIPATION IN THE CEN/TC

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.

As a reflection of the Technical Committee's scope CEN/TC 465 will follow the Stakeholder approach recommended in ISO Guide 82. This inclusive approach is justified as a result of the sustainability focus is more likely to be achieved by society as a whole if social, economic and environmental aspects are addressed in an integrated manner. Sustainability is relevant to all levels of human activity, from the global level to the national, regional and community levels, and the behaviour of individuals. It is also affected by all types of organizations, including governments, non-governmental organizations, companies, co-operatives, federations and unions.

The Technical Committee acknowledges that different groups of stakeholders may be affected by sustainability and sustainable development in cities and communities, either individually or collectively. Any group that can potentially be affected by the use or application of a standard should be taken into consideration in developing standards in CEN/TC 465. The Technical Committee will consider how application of its standards may have a sustainability impact on stakeholders, be it either beneficial or adverse.

The Technical Committee will encourage well-anchored, innovative and cross-sectoral solutions that are replicable to different world contexts. This requires the orchestration of a constellation of actors including cities and local governments, municipal services, citizens, public and private sector entities, research centres and non-governmental organizations (NGOs). The Technical Committee will seek the appropriate participation, in terms of both the diversity of stakeholders and expertise, to effectively address sustainable development in cities and communities and the specific challenges for engagement of the following stakeholders by offering appropriate engagement options:

- The Technical Committee has identified cities, citizens, local governments and their associations as key stakeholders. The Technical Committee is committed to encourage their participation and highlight their standardization needs. Cities and local governments incorporate a variety of actors, be they decision-makers which includes political and administrative decision-makers and planners. With an understanding of the limited capacity of cities and communities the Technical Committee will strive to engage the European Associations of Cities and Local Governments in its work and will strive to create a dialogue with them on how to best include their members and clients in the CEN/TC 465 standardisation activities.
- Considering the broader sustainability issues addressed in CEN/TC 465, special focus should also be given to citizens, including to future generations and the wider general public. In Europe 80 million citizens are forecast to have accessibility needs which cities need to consider when services are being transformed. ISO Guide 82 suggests particular attention is paid to potentially vulnerable stakeholders, for example children or persons with special needs, as the impact on vulnerable stakeholders can be both greater and more difficult to identify than for other stakeholder interests. The Technical Committee will strive to engage European Consumer and Citizens Associations in its work and create a dialogue with them regarding how to best implement their members and citizens requirements in CEN/TC 465 standardisation activities.

- Private sector organisations interested in cities and communities represent a wide spectrum of both SME's and industries including developers, operators, contractors, designers, consulting engineers, industries and manufacturers of technological solutions and service providers. The private sector is identified as key stakeholders who could contribute their innovation capabilities for the benefit of cities and communities with the implementation of projects and infrastructures for sustainability and sustainable development. Standards could enhance collaboration between a local government and private sector partner to enable the mobilization of their innovation capacities, including with Public-Private-People Partnerships (PPPP). Organisations may want to participate directly or be represented by their associations.
- Institutions, associations or initiatives driving research & innovation for sustainability and sustainable development in cities and communities will be given specific focus. This is intended to support targeted research and foster market integration of innovative solutions and services. For example, the Urban Research Alliance or the Joint Programme Initiative Urban Europe.
- Institutions driving financing and investment for sustainability and sustainable development in cities and communities will be given a specific focus to support targeted and innovative financing and investment solutions and foster market integration of innovative solutions and services.
- European institutions driving policies, strategies, and funding programmes addressing sustainability and sustainable development in cities and communities as a contribution to the EU Green Deal will be invited to participation in the Technical Committee. Their participation will enable stakeholder support for the integration of standardization work with the EU policy framework, in particular European Commission Services, Economic & Social Committee for its representation of civil society, the Committee of the Regions (elected representatives from local governments across the EU) and the European Parliament's Urban Intergroup.

The Technical Committee, in collaboration with the SF-SSCC will consider how to appropriately respect, consider and respond to the needs of the identified relevant stakeholders and, where possible and practical engage with them in an exchange of ideas and information sharing. This approach enables input from a broad and balanced base of expertise and representation reflecting geographic, gender, ethnic and stakeholder diversity. The Technical Committee will leverage the structures and connections in the European Commission to involve the widest multi stakeholder participation enabling the work of the Technical Committee to be transparent to all stakeholders.

4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

A consensus is emerging to emphasize the fundamental role of cities and communities in functional urban, rural and peri-urban areas for the implementation of all SDGs. Cities and communities are mandated to prepare and implement plans, programs and projects of all kinds by mobilizing across many domains, and by involving all stakeholders in the development, implementation and evaluation of local actions. Emphasis will be placed on the questions and challenges using a systemic approach whilst taking into account the specificities of European cities and territories. Additionally, account will be taken of their high level of ambition with reference to the six aims of sustainable territorial development, as described in ISO 37101:

- The attractiveness including potential for economic development and general appeal to citizens and investors
- Preservation and improvement of the environment including climate change mitigation protection of biological diversity and ecosystem services, reducing pollution
- Resilience including preparation for climate change, risk reduction actions and crisis management
- The responsible use of resources including circular economy, improved land management, respect for scarcity for all types of resources.
- Social cohesion including equitable accessibility to services and the reduction of inequalities
- Well-being including access to quality-of-life opportunities, human capital improvement, self-confidence and collective maturity.

Additionally, as a means of contributing to the implementation of the UN SDG's and the EU Green Deal, and in order to achieve sustainable cities and communities by 2050, Technical Committee 465 will adopt and create standards to support the transformation of European cities and communities:

- to improve quality of life and well-being in harmony with nature and within planetary boundaries by means of innovative, intelligent, evidence-supported, transformative solutions that are mindful for nature's contribution to people, and
- to achieve productive, sustainable, and resilient municipalities for a liveable and inclusive Europe.

4.2 Identified strategies to achieve the Technical Committee's defined objectives

To implement this vision and meet its objectives the Technical Committee aims to assist cities and community decision making and support their implementation of sustainability and sustainable development by developing various standard deliverables (EN's, CEN/TS's/ CEN/TR's) focusing on requirements, frameworks, guidance and supporting tools and techniques. The work programme will specify the details for developing the Technical Committees standardisation plan and reference framework.

In its work programme, the Technical Committee will consider the options for an appropriate work structure reflecting the complexity and integrated nature of its standardization activities, taking into account the conceptual and policy framework, and working relationships. In particular, the Technical Committee will align its architecture, structures and procedures with the identified key policies (both global and European) for terminology, objectives, principles, timelines, review



mechanisms, and additional embedded aspects related to management, governance, indicators, reporting, evaluation/verification, infrastructure, and innovation.

International and European policy documents establish an important framework for CEN/TC 465. The Technical Committee is expected to contribute to the delivery of the UN Sustainable Development Goals, taking into account other relevant International agreements for example, the Paris agreement, the New Urban Agenda, Sendai Framework and UN Convention on Biological Diversity. The Technical Committee will establish the UN 2030 agenda, using SDGs, as the guiding framework and respect the integrated and indivisible character of the SDGs whilst balancing the three dimensions of sustainable development of cities and communities (economic, social and environmental) as a benchmark for the Technical Committee's standardization work. To support the European sustainability ambitions and policies, the European Green Deal, EU Urban Agenda and the New Leipzig Charter will be the key framework documents used.

The Technical Committee will employ a conceptual approach and use the terminology from ISO/TC 268, which suggests that sustainability is the objective of cities' and communities' development and resilience is a state and helps organisations to withstand shocks and stresses. This includes smart, intelligent, agent based processes and other similar approaches as a means of supporting resilience and sustainable development. Standardisation activities will include management processes as well as solutions and services.

CEN/TC 465 will focus its standardization on the development of a holistic and integrated approach in response to the needs of European Cities and Communities in functional urban, rural and peri-urban areas. All standards will promote innovative approaches to solution and service delivery and be designed for use by all cities, communities, citizens and their interested parties as a means of achieving sustainable development in functional urban, rural and peri-urban areas. Standards will support the purposes of urban sustainable development as defined by ISO 37101 related to sustainable cities and communities, namely resilience, attractiveness, well-being, social cohesion, preservation and improvement of environment, responsible resource use, and will be aligned with the main pillars of sustainable development, economic, environmental and social. The Technical Committee will refer to the standards for Sustainable Cities and Communities produced by ISO Technical Committee 268 as a foundation of its work and will take into consideration other relevant standards applicable to this field such as ISO 18091 Quality management systems and Guidelines for the application of ISO 9001 in local government.

The opportunity to launch European and international standardization work to assist sustainability and sustainable development in cities and communities has been under consideration for several years. In recognition of the strategic and transversal nature of the subject, members of CEN have created a European Coordination Group, the SF-SSCC.

All European ongoing standardization work is to be considered, in close cooperation with the SF-SSCC which is a platform of exchange to ensure consistency and complementary standardization development under the responsibility of the three European Standardization Organizations. The SF-SSCC will continue to be a platform of exchange where standardization needs will be discussed prior proposing NWIPs to the appropriate Technical Committees.

The standardization activities by this Technical Committee are intended to be developed in a consistent and complementary approach with International Standards. There will be a focus on European context specific needs in order to avoid any duplication with existing standardization activities.

Within ISO, normative work has primarily been developed in ISO/TC 268 *Sustainable Cities and Communities*. ISO/TC 268 was created in 2012 and has now published a set of foundational



standards in this area. The Technical Committee will pay particular attention to follow a consistent and complementary approach with the international standards developed under the responsibility of ISO/TC 268. In the work programme the Technical Committee will consider standards published in ISO/TC 268 for adoption as part of European standardization with input from participating National Standardisation Organisations, taking into account specific European needs. ISO 37101 establishes a key standard related to the approach for this Technical Committee, any future revision or amendment will be taken into account. Arrangements and joint work under the Vienna Agreement will also be utilised to avoid duplication.

The European Research & Innovation (R&I) programmes Horizon 2020 and from 2021 Horizon Europe are focused on sustainability and sustainable development in cities and communities for functional urban, rural and peri-urban areas. Innovative solutions and services have been and will continue to be developed to support the ecological and digital transition of Europe's cities and communities in areas such as climate change mitigation and adaptation, energy transition, circular economy, sustainable food, biodiversity and ecosystem restoration and nature-based solutions. The Technical Committee in close collaboration with the SF-SSCC will consider standardisation options offered via R&I projects, technical platforms and Horizon Europe Partnerships for example the European Innovation Partnership Smart Cities and Communities (EIP-SCC). These R&I innovations are designed to create capacity to foster ecological and digital transition and create new collaborations, engagement and standardisation requirements. This activity is expected to include a regular exchange with European Commission services to consider relevant R&I activities which are focused on the key objectives of the Technical Committee.

The Technical Committee is committed to encouraging the participation of cities, citizens, local governments and their associations in order for them to highlight their standardization needs. According to research carried out by ETSI these stakeholder groups suffer from limited capacity and financial means to enable continuous participation or in person-participation in technical committees, leading to specific challenges engaging this key stakeholder group. As a result, CEN/TC 465 will employ innovative and appropriate methods to allow cities, communities and citizens to exchange with European Associations of Cities and Local Governments on how to best implement their members and client's requirements in the CEN/TC 465 standardisation activities. Methods may include surveys, workshops or webinars convened to articulate their sustainability and sustainable development requirements and offering opportunities to collect their input at strategic milestones of standard development.

European standards will also support international exchange with cities and communities in other regions, supporting Europe's profile and global leadership in sustainability. In particular, strong demand has been expressed by many mayors from developing countries in Asia and Africa, which will open an opportunity for EU International exchange and collaboration on solutions and services for sustainability and sustainable development in cities and communities. Existing European partnerships will be instrumental to facilitate these exchanges. For example, the international association of French speaking mayors has decided to widely disseminate and train the mayors in its association on the adoption of particular standards produced by ISOTC 268, specifically ISO 37101 and ISO 37104.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC WORK PROGRAMME

Standardisation for sustainability and sustainable development addresses a complex framework of nested interests, responsibilities, competencies related to topics (reference 17 UN SDGs), dimensions (ecology, society, economy), policies (UN: SDGs, UNFCCC, UN CBD, UN DRR), Europe: Green Deal, topical strategies, regulations), systems (technological, social, green infrastructures), actors (public and private), and levels (UN, Europe, States, Regions, Cities, Communities). Within this complexity, the Technical Committee will focus on standards supporting the transformation of European cities and communities towards sustainability:

- to provide for people's life quality and well-being in harmony with nature and within planetary boundaries by means of innovative, intelligent, evidence-supported, transformative solutions that are mindful of nature's contribution to people, and
- to achieve just, green and productive societies for a liveable and inclusive Europe.

The Technical Committee is aware of the challenge to establish and maintain effective communication with institutions and organisations reflecting the variety and complexity of sustainable development aspects, policy frameworks and standardization needs. To effectively implement its work-programme, the Technical Committee will reflect upon this framework:

- by carefully mapping and establishing cooperation with relevant institutions and actors based on the categories outlined in section 3 Participation in the CEN/TC. The Technical Committee is interested in implementing an effective vertical collaboration for standardization supporting sustainable cities and communities at the intersection of European, national and local level
- by carefully mapping and analysing relevant policy frameworks at international and European level and analysing complementary standardization needs
- by carefully mapping relevant existing standards and with reference to the needs for sustainable cities and communities. Potential gaps will be analysed and addressed to create a holistic and integrated approach in response to the needs of European cities and communities in functional urban, rural and peri-urban areas.

The implementation of these actions will prepare the Technical Committee to address the challenges related to the complex standardisation framework and respond to key challenges in particular.

Key challenge #1: Addressing the needs of and facilitating with cities, citizens and local governments

The Technical Committee is aware of a unique challenge in standards due to the nature of standards writing, which is largely done by volunteers from a variety of organizations who meet only occasionally, and often disband after a particular project is completed. Whilst this establishes a general challenge, it is of particular relevance when considered in conjunction with the identified key stakeholders cities, citizens, and local governments in terms of available financial and resource availability and the need for representation within the standardization process.

The Technical Committee via the work programme will identify appropriate collaboration methods and include specific activities to appropriately reflect the needs, demands, experiences and good practices based on immediate needs of the standardization priorities and the preparation and the drafting of standards. The Technical Committee will draw upon expertise of its members and seek

close collaboration with cities and communities, whatever their size, as well as citizens and their associations, for example, CEMR Council of European Municipalities and Regions and ANEC, the European Voice of Consumers. It will also draw upon pre-existing knowledge in standardization and citizens as reflected in ETSI's Human Factor Technical Committee and their report 'Smart Cities and Communities: Standardisation to meet citizen and consumer requirements'.

Key Challenge #2: Aligning with relevant policy framework

Policy frameworks, their interpretation and underpinning actions to implement may require modification. The Technical Committee will carefully consider key aspects to address and effectively and appropriately align its standardisation activities with the relevant policy framework to facilitate a meaningful and complementary contribution. This may include a review of the terminology used, objectives included, principles applied, timelines addressed, review mechanism established, and further embedded aspects related to different aspects of process management. Some of these aspects represent challenges, e.g., an aligned time-horizon of standards with policy objectives such as the 2050 Climate Targets outlined in the Paris Agreement, which may be used to underpin the monitoring efforts of the Technical Committee with regard to the adoption of published standards.

To create an appropriate alignment approach with the relevant policy framework, the Technical Committee standards will facilitate communication and cooperation with the responsible EU institutions and organisations. Engagement with the Technical Committee and reference to current activities will be included in relevant communication. This will include but not be limited to collaboration with EU Commission Services (responsible for the EU Green Deal) and enhancing strategies for sustainability and sustainable development in cities and communities. Additionally, collaboration will be created with relevant EU institutions to reflect local and regional issues. For example, the European Committee of the Regions, European Economic and Social Committee, and for financing with the European Investment Bank, European Bank for Reconstruction and Development, and relevant research & innovation actions.

Key challenge #3: Aligning with ongoing standardisation activities

The Technical Committee intends to develop its standardisation activities in a consistent and complementary approach with International Standards, but with a focus on European context specific needs, avoiding any duplication with existing standardization activities. To achieve this, it will be of the utmost importance to carefully consider all relevant European ongoing standardization work. In particular, close cooperation is agreed with the SF-SSCC to ensure consistency and complementary standardization development under the responsibility of the three European Standardization Organizations. The SF-SSCC will continue to be a platform of exchange where standardization needs will be discussed prior to proposing NWIPs to the appropriate Technical Committees.

Key challenge #4: Integrating aspects related to sustainable, resilient and smart

Whilst all of Europe is committed to implementing the UN SDGs, it is a European reality, that different countries, regions, cities and communities approach the implementation from different perspectives, and from different circumstances and frameworks. Some countries have established a 'Smart City' approach as key programme to foster resource efficiency in cities and communities, gradually embracing other aspects of sustainability. The Technical Committee is aware of different approaches and priorities applied across European countries and will ensure this is reflected particularly in developing requirements, frameworks, guidance, supporting tools and techniques.