



The Manizales Manifesto

“Circular Economy and Smart Sustainable Cities & Communities”

Adopted by the participants of the 7th Green Standards Week in Manizales, Colombia, on 5 April 2017

The International Telecommunication Union (ITU) together with the Economic Commission for Latin American and the Caribbean (ECLAC), the United Nations Industrial Development Organization (UNIDO), the United Nations Environment Programme (UNEP), the Basel Convention Regional Centre for the South American Region (CRBAS), the United Nations Economic Commission for Europe (UNECE), the United Nations Human Settlements Programme (UN-Habitat), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Telecommunications Regional Technical Commission (COMTELCA), the Inter-American Telecommunication Commission (CITEL), the CAF-Development Bank of Latin America, the Inter-American Association of Telecommunication Enterprises (ASJET) and the University of Manizales, welcome the outcomes of the **seventh edition of the Green Standards Week** from 3 to 5 April 2017 in El Recinto del Pensamiento, Manizales, Colombia.

This year, the Green Standards Week is dedicated to the theme of “**Circular Economy and Smart Sustainable Cities**” and was attended by over 800 participants.

We, the participants of the Green Standards Week 2017, recall our active commitment to the overarching objective of sustainable development and to the 2030 Sustainable Development Goals. We hereby declare that our work and commitment focuses on initiating development that meets the needs of the present generation, without compromising the ability of future generations to meet their own needs. In this regard, we welcome and actively support the following principles and concepts:

- a) The establishment of Smart Sustainable Cities (SSC), based on the following international definition:

“A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social, environmental as well as cultural aspects”.

- b) The achievement of the "Connect 2020" that envisages "an information society, empowered by the interconnected world, where telecommunications/ICTs enable and accelerate social, economic and environmentally sustainable growth and development for everyone";
- c) The elimination of any and all discrimination against women and girls, thereby encouraging empowerment of women, and achieving equality between all genders. ICTs, the concept of circular economy and the environment for development and entrepreneurship, can help facilitate the sustainable use of resources, while promoting gender equity and fostering socio-economic development through standardization.
- d) The need to respond urgently to the environmental challenges that endanger the survival of our planet and of human civilization. In particular, taking urgent action to combat climate change and its impacts, reducing and managing e-waste safely and effectively, and improving energy efficiency by raising awareness on the potential of the ICTs and implementing strategies and international standards to fully create and maintain a circular economy.

To help realize these principles and developments, and based on the key issues discussed during the **7th Green Standards Week**, we, the participants, strongly support the following actions to be taken by relevant stakeholders across the globe:

1. **Set the vision for your Smart Sustainable City** which encompasses feasible governance and organizational mechanisms to facilitate the efficient implementation of smart city solutions that serve the citizens more effectively and sustainably and encourage gender equality in order to maximize economic and social opportunities, while minimizing environmental footprint.
2. **Identify your Smart Sustainable City targets** and establish a long-term, enabling structural framework to facilitate the implementation of time-phased goals and the adoption of an appropriate regulatory and financing environment that promotes investments. This may also include the development of a smart city master plan to catalyze the achievement of the targets of the Sustainable Development Goals (SDGs), the Paris Agreement, the New Urban Agenda, to drive socio-economic development and transition to a circular economy with low-carbon footprint in cities and countries.
3. **Achieve political commitment at all government levels** and facilitate cross-sectoral decision-making to improve the feasibility of smart city projects and maximize its outcomes. The support, commitment and involvement of relevant public and private stakeholders is essential to facilitate smart sustainable city planning. Collective decisions taken with relevant stakeholders can improve the quality and effectiveness of participatory projects and open up further opportunities for collaboration.
4. **Transform an information society into a knowledge society** to take advantage of the ICT revolution, reflect on the strengths and shortcomings of existing smart city initiatives and promote the adoption of a social vision that encompasses conservation of culture, innovation, open data, information sharing, freedom of expression, plurality, inclusion, accessibility and participation for the implementation of sustainable consumption and production patterns. This vision is expected to ease the transition to a greener, people oriented and a more sustainable urban ecosystem and will help evaluate the ongoing smart sustainable city processes by providing an effective and flexible feedback mechanism that can facilitate the updating of the future smart city vision and strategies. Knowledge societies help bring about institutional changes for boundless human development as



they re-build the social fabric of organizations for the mass utilization of the available knowledge on smart cities.

5. **Bring the circular economy to life in Smart Sustainable Cities** by helping maximize the value of products and assets' in urban areas and by providing an effective channel to drive recycling and legal disposal of waste, particularly of electrical and electronic equipment (WEEE). Enabling the transition to a circular economy within the smart city ecosystem will help reduce carbon emissions and the dependence on existing raw material resources by ensuring resource-efficiency and recycling. Additionally, promoting the role of women entrepreneurs who generate business solutions that convert waste into new products, boosts the circular economy and gender equality.



6. **Make artificial intelligence and Internet of Things a reality in smart cities** to create a secure network of interconnected devices that make it possible to orchestrate a system of learning from experience. With this system, it would also be possible to recognize patterns for self-maintenance and monitoring along with mapping and pro-actively intervening on potential urban concerns including overcrowding, greenhouse gas emissions, traffic congestion and deforestation. The Internet of Things in smart cities has to integrate and analyze large amounts of data from multiple sources to improve the digital agility and provide the urban system with cognitive intelligence to enable users to interact with the environment.

7. **Build data-driven systems in smart sustainable cities** for embedding the advances in technology and data collection to manage the growing data traffic from sensors, devices and other objects on the IoT network and impose the required trust, privacy and security for the benefit of consumers, based on an access and ownership framework that incentivizes data-sharing among relevant stakeholders.
8. **Create your smart sustainable city** by upgrading the existing traditional urban infrastructure, deploying broadband networks and integrating the required ICT components and applications within appropriate smart city action plans for implementation. In general, this transition recognizes the need for a nuanced approach to deploy technologies, investments and risk management techniques to address political, implementation, and financial barriers.
9. **Measure your smart city progress** by implementing interoperable international standards for smart sustainable cities which provide a comprehensive and harmonized approach for coordination between the public and private sectors, as well as national and international stakeholders to utilize innovations in ICTs and monitor improvements in the ability of smart cities to deliver services such as smart grids, smart water meters, intelligent sustainable buildings, waste management and smart mobility and transportation systems. This also includes the use of impact management in smart sustainable cities and the use of explanatory tools to translate concepts of sustainable development and circular economy for practical implementation and the adoption of performance-assessment toolkits to evaluate the effectiveness of the various 'smart' efforts taken by urban stakeholders.
10. **Shape the global agenda** by participating in the United for Smart Sustainable Cities initiative to facilitate information sharing on smart city transitions, to promote responsibility and accountability and to gain insights on monitoring the journey to a smart sustainable city using the ITU/UNECE smart sustainable city KPIs. The unique innovative partnership between members of the U4SSC promotes peer-to-peer learning and provides a platform for showcasing successful examples of



urban transformation as well as the procurement and development of new funding models.

We, the organizers and participants of the **7th Green Standards Week** express our sincere gratitude to the Municipality of Manizales and the Ministry of Information and Communication Technologies, Colombia for graciously hosting this event.

Additional information on 7th Green Standards Week can be found at: <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/gsw/201704/Pages/default.aspx>
