Enabling a smart sustainable future for all cities

United for Smart Sustainable Cities

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Cities

By 2050, it is expected that **68%** of the population in the world will be living in urban areas

Cities continue to face an increasing number of **challenges**

THE NEW URBAN AGENDA

New Urban Agenda (2016) highlights the importance of leveraging digital technologies for smart cities

SDGs

Cities are at the heart of the **Sustainable Development Goals**

Common city challenges

population growth

economy

food security

education

citizen health

housing

transportation

safety and security
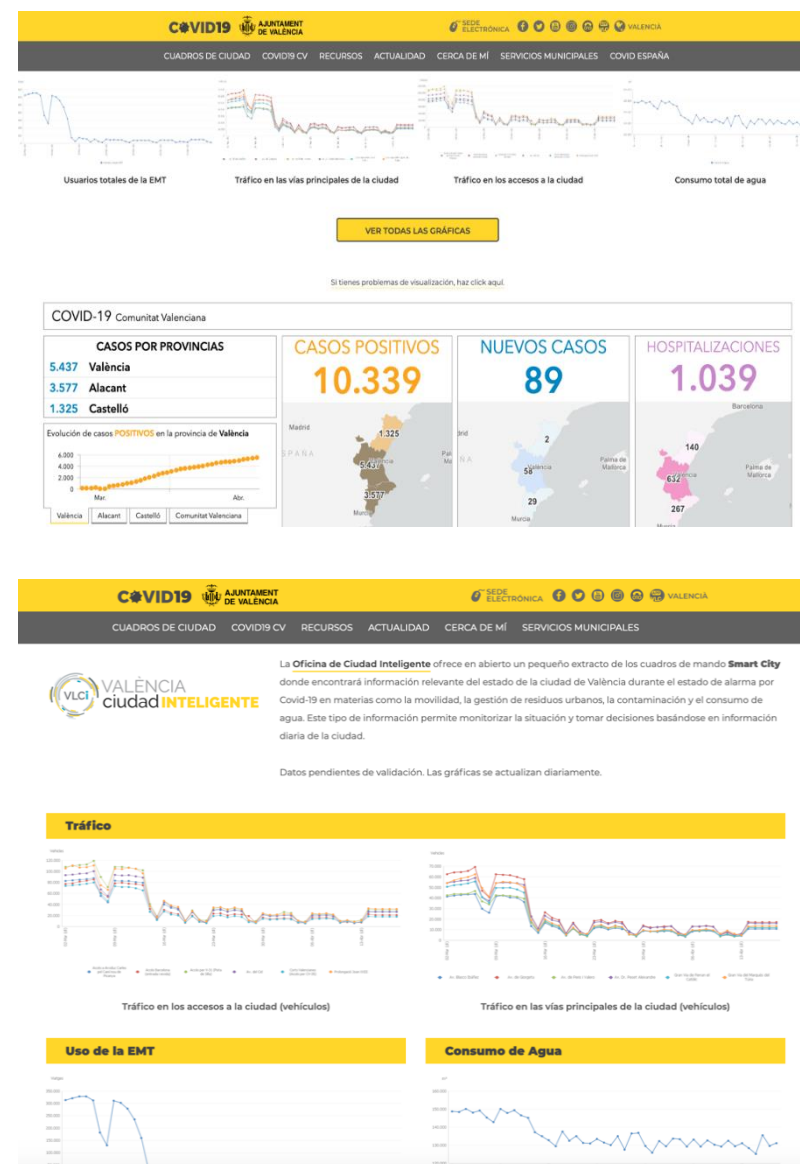
infrastructure

services delivery
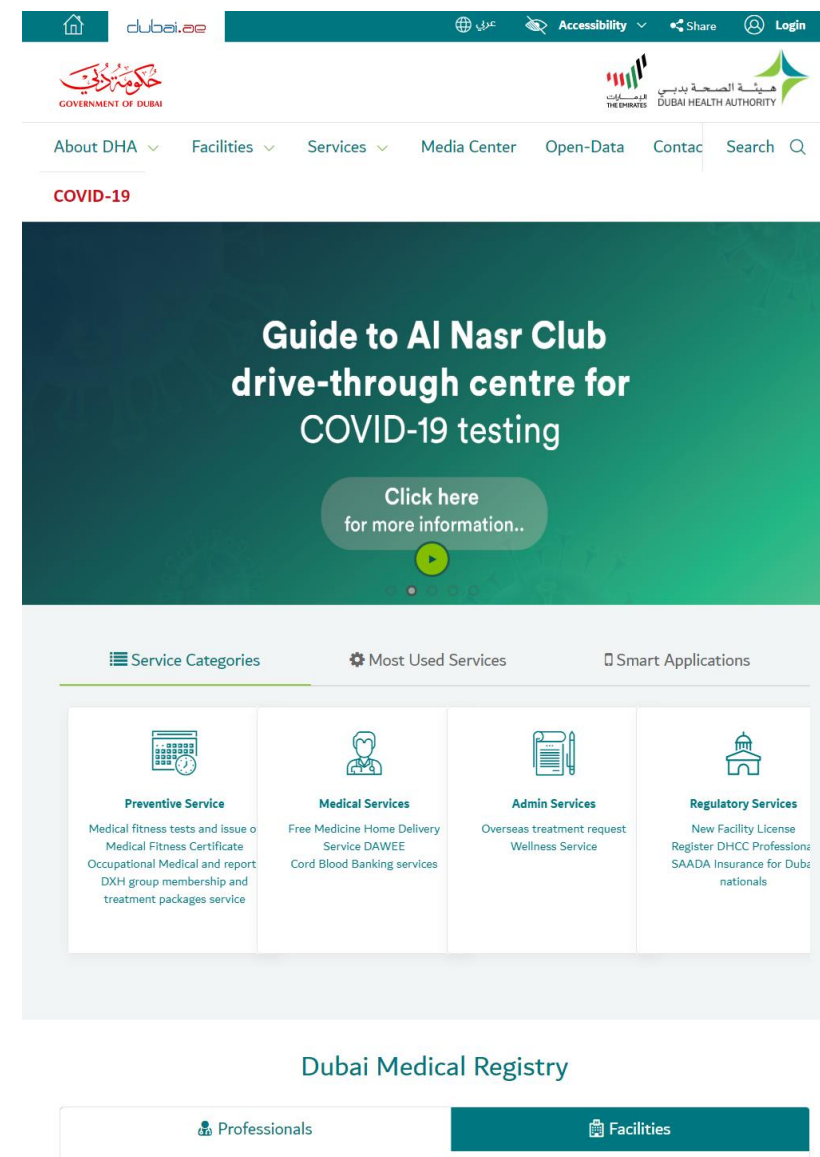
environment

waste

2020's defining challenge

COVID-19

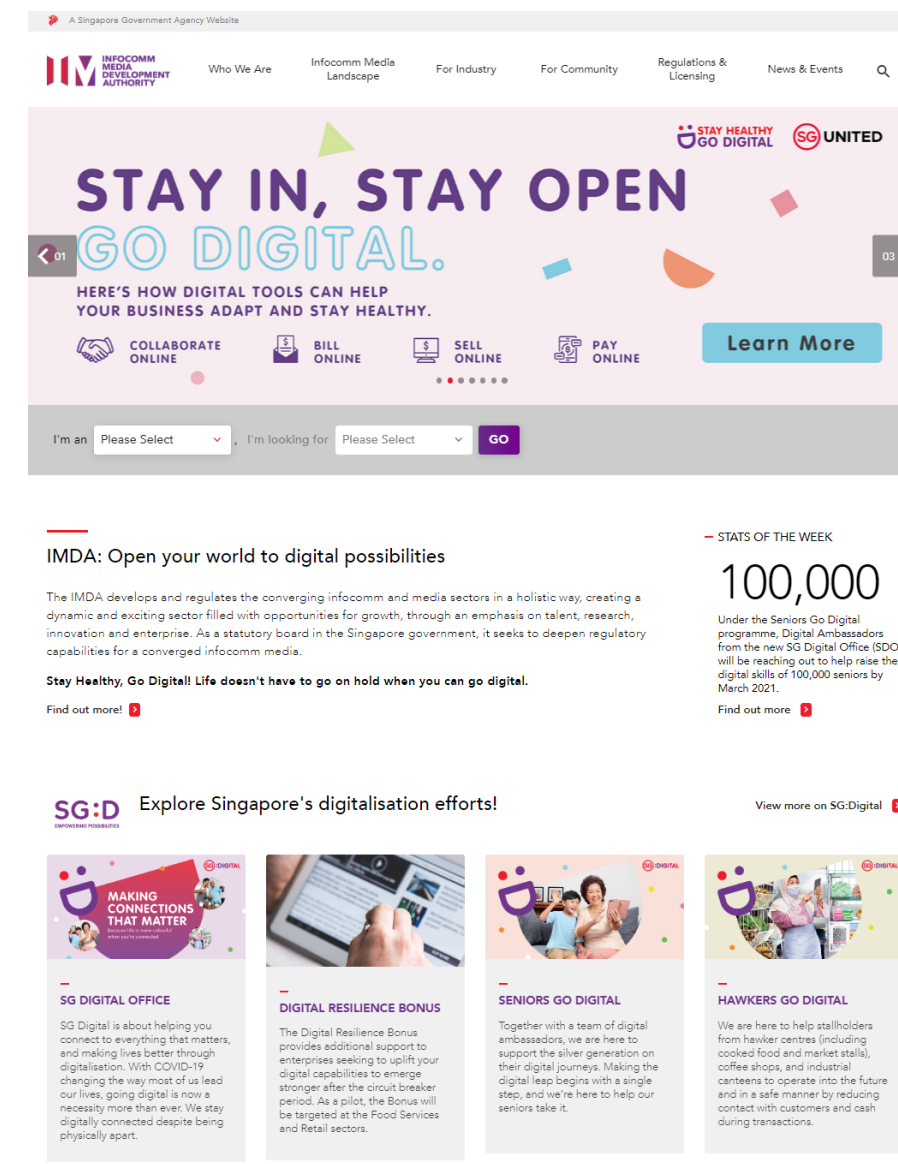# How a smart sustainable city responds to COVID-19

Valencia, Spain

Dubai, UAE

## Singapore

"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."

Recommendation ITU-T Y.4900
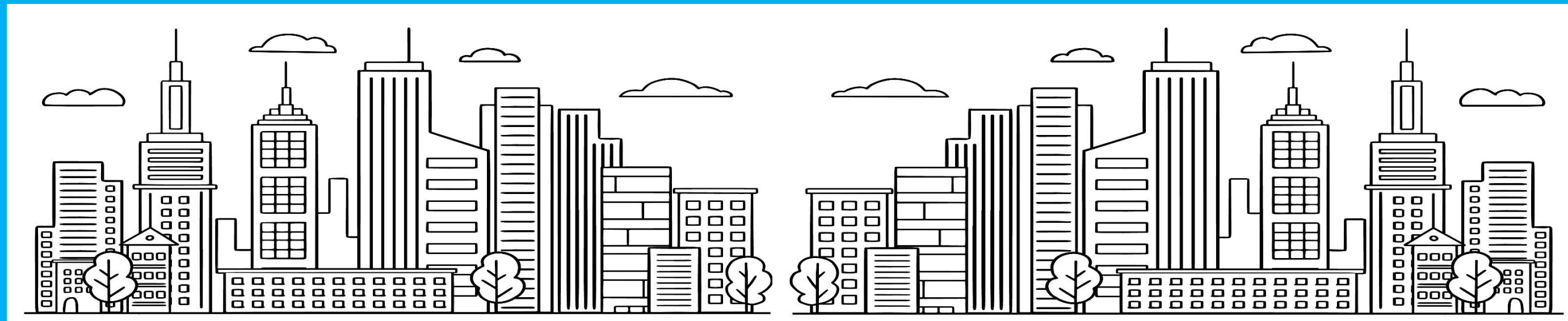
U4SSC is a UN initiative coordinated by the ITU, UNECE and UN-Habitat along with other 14 UN bodies that advocates for public policy to encourage the use of ICTs and digital technologies to facilitate and ease the transition to smart sustainable cities.

Supported by

U4SSC and the SDGs

U4SSC contributes to achievement of the Sustainable Development Goal 11: "Make cities and human settlements inclusive, safe, resilient and sustainable".

It is rooted in the idea that to successfully implement sustainability strategies, cities need to leverage ICTs & digital technologies.

11 SUSTAINABLE CITIES AND COMMUNITIES

Current work

U4SSC is working on the following Thematic Groups:

- City platforms

- Economic and financial recovery in cities and urban resilience building in the time of COVID-19

- Guidelines on tools and mechanisms to finance SSC projects

- Guiding principles for Artificial Intelligence in cities

- Blockchain for cities

Current work

- Impact of Frontier Technologies in Cities

- Simple ways to be smart

- Practitioner guide to measuring Smart Cities and Communities

- Practitioner guide to monitoring Smart Cities and Communities

- Procurement Guidelines for Smart Sustainable Cities

- United for Smart Sustainable Cities Index

U4SSC Key Performance Indicators for Smart Sustainable Cities

The U4SSC initiative has developed a set of international key performance indicators (KPIs) for smart sustainable cities (SSC) to establish the criteria to evaluate ICTs' and digital technologies' contributions in making cities smarter and more sustainable, and to provide cities with the means for self assessment.

Collection Methodology for Key Performance Indicators for Smart Sustainable Cities
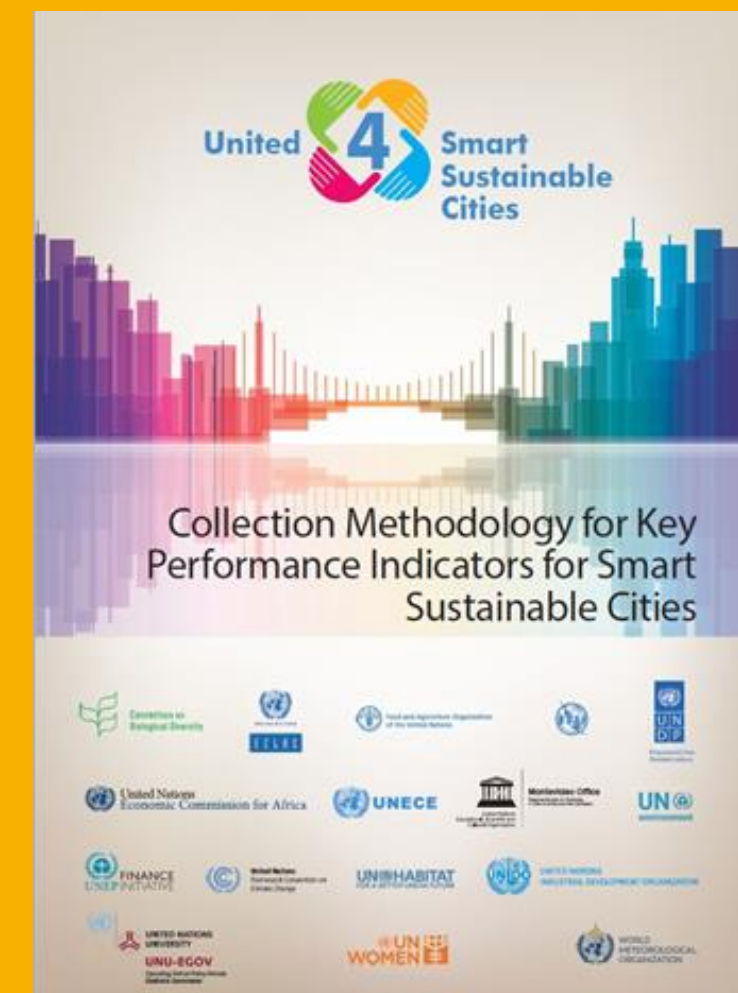
Aims

- To support cities in the implementation and use of the U4SSC KPIs

- To provide cities with a standardized method to measure performance and progress in regard to:

    o Achieving the Sustainable Development Goals (SDGs);
    o Becoming a smarter city; and
    o Becoming a more sustainable city.

KPIs Framework
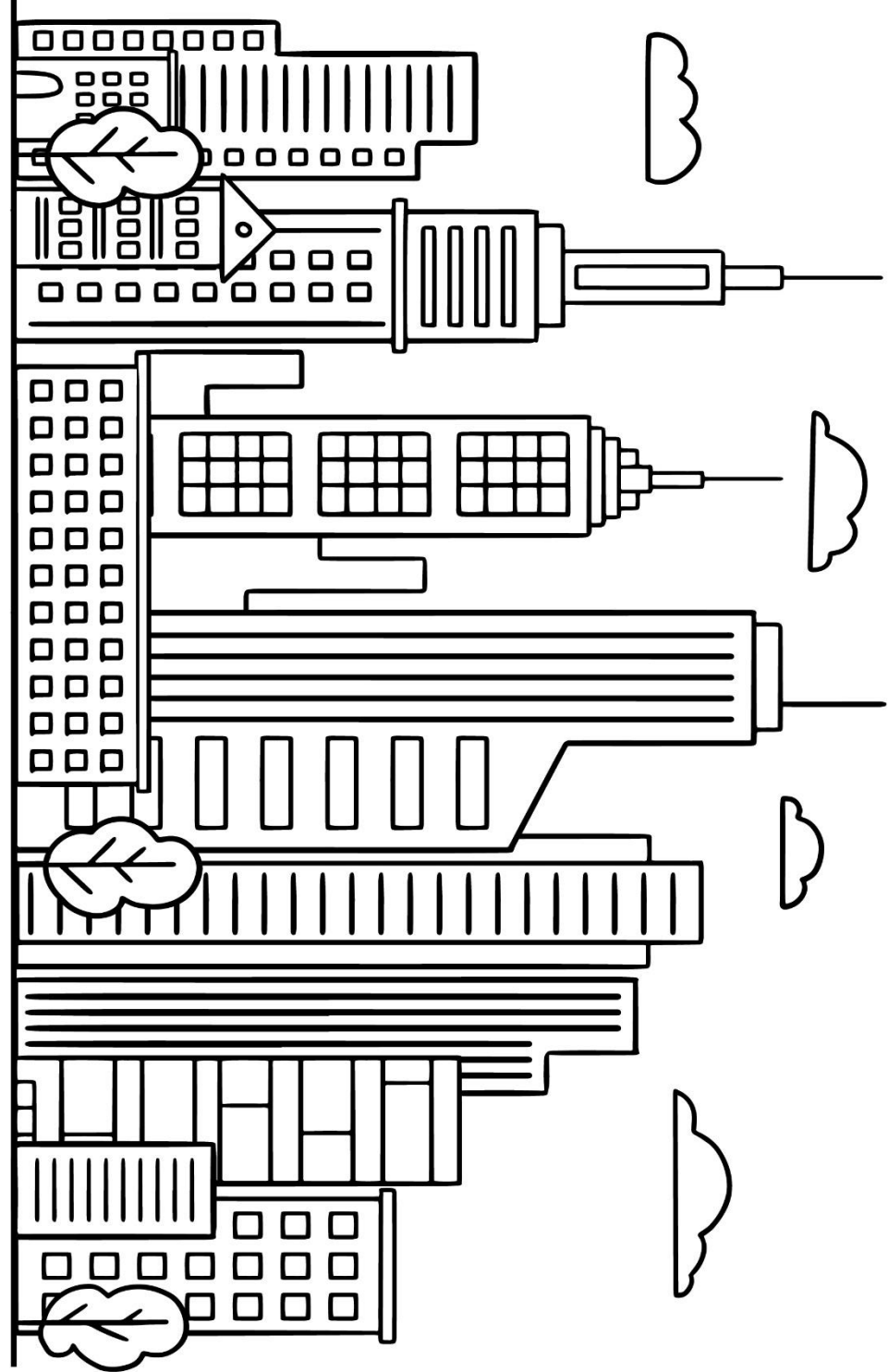
Dimensions

Economy	Environment	Society and Culture
• ICT Infrastructure • Water & Sanitation • Drainage • Electricity Supply • Transport • Public Sector • Innovation • Employment • Waste • Buildings • Urban Planning	• Air Quality • Water and Sanitation • Waste • Environmental Quality • Public Space and Nature • Energy	• Education • Health • Culture • Housing • Social Inclusion • Safety • Food Security

Categories

55 Core Indicators + 36 Advanced Indicators

• 20 Smart + 32 Structural + 39 Sustainable

• 132 Data Collection Points

Applications

- Trend analysis

- Benchmarking and policy guidance

- United for Smart Sustainable Cities Index

U4SSC publications

A library of free resources available at:

www.itu.int/en/ITU-T/ssc/united/Pages/publications-U4SSC.aspx
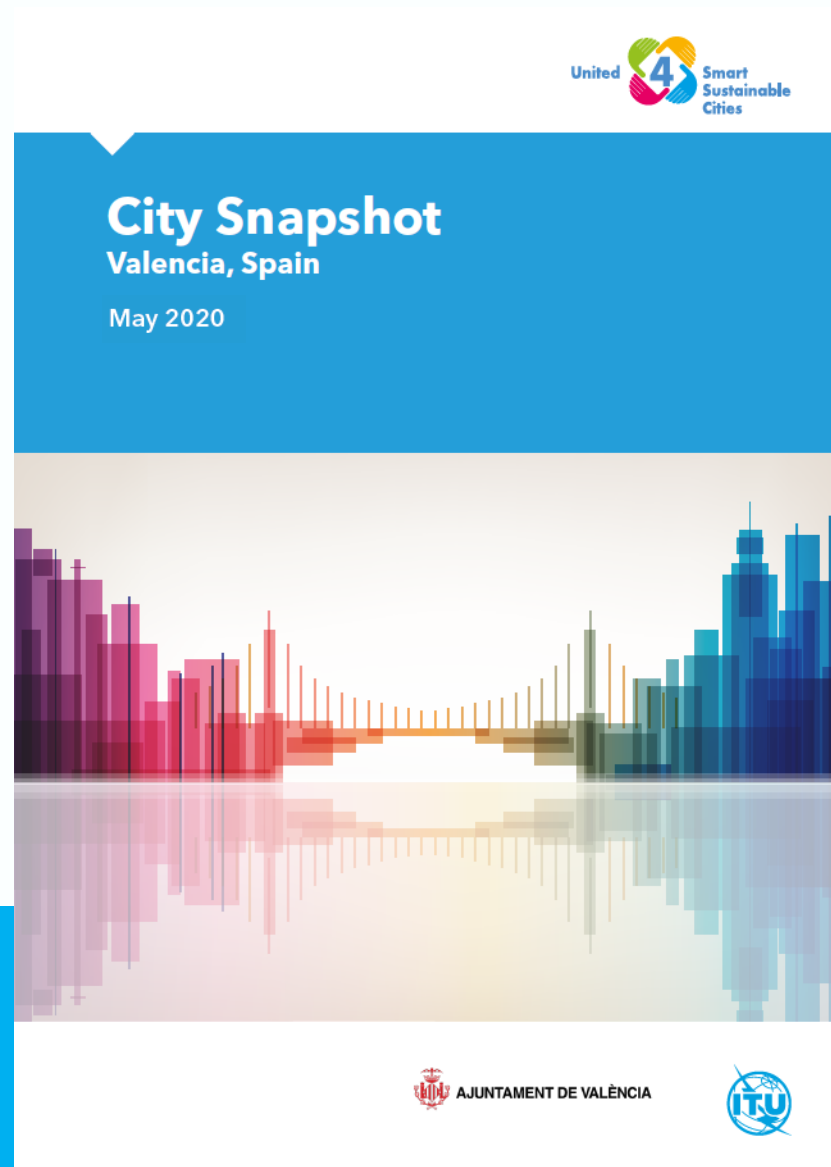
Snapshots

Provide a visual overview of a city's U4SSC KPI performance based on global benchmarks

Verification Reports

Summarize the conclusions of a city's U4SSC KPIs Project

Factsheets

Elaborate and analyze the results of a city's U4SSC KPIs Project

Case Studies

Detail a city's journey towards becoming a smart sustainable city

Implementing ITU-T International
Standards to Shape Smart
Sustainable Cities:
The Case of Dubai
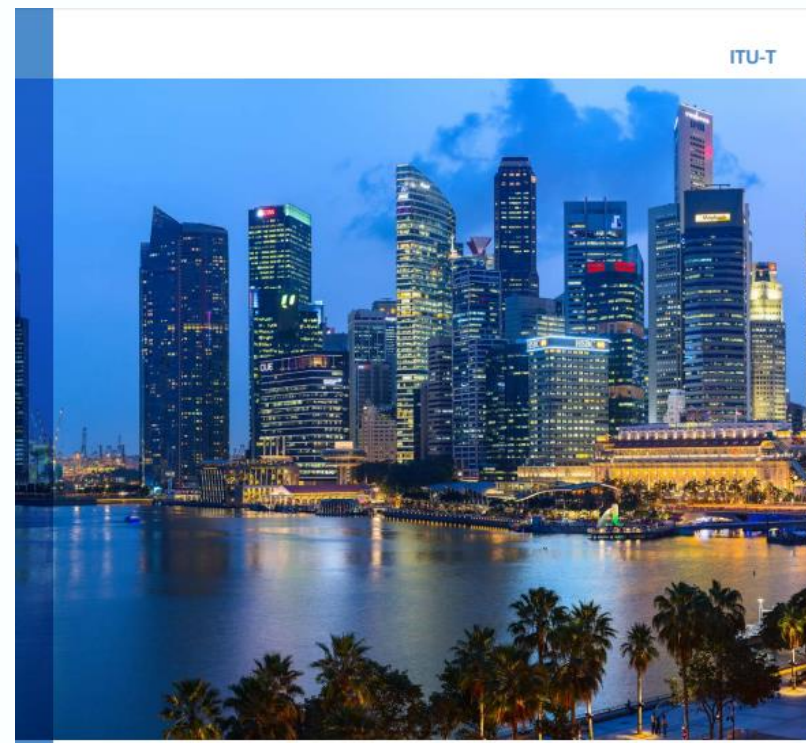
Implementing ITU-T International
Standards to Shape Smart
Sustainable Cities:
The Case of Singapore

Implementing ITU-T International
Standards to Shape Smart
Sustainable Cities:
The Case of Moscow

Reports

Cover a variety of SSC and technology related topics

United 4 Smart Sustainable Cities

Enhancing innovation and participation in smart sustainable cities

United 4 Smart Sustainable Cities

Connecting cities and communities with the Sustainable Development Goals

United 4 Smart Sustainable Cities

Implementing Sustainable Development Goal 11 by connecting sustainability policies and urban-planning practices through ICTs

Frameworks

Offer methodologies for cities to solve their pressing urban challenges

City Science Application Framework

Air quality management in Southern California, USA
Case study of the U4SSC City Science Application Framework

Smart Dubai Happiness Meter in Dubai, United Arab Emirates
Case study of the U4SSC City Science Application Framework

Crime prediction for more agile policing in cities - Rio de Janeiro, Brazil
Case study of the U4SSC City Science Application Framework

Data driven energy savings in the Hyperdome shopping centre in Queensland, Australia
Case study of the U4SSC City Science Application Framework

Fine dust filtration in Stuttgart, Germany
Case study of the U4SSC City Science Application Framework

Smart Dubai - Rashid - City Concierge
Case study of the U4SSC City Science Application Framework

Identifying cascading effects on vital objects during flooding
Case study of the U4SSC City Science Application Framework

Unlocking the potential of trust-based AI for city science and smarter cities
Case study of the U4SSC City Science Application Framework

TRULY GLOBAL REACH

More than 100 cities worldwide are already participating in the U4SSC KPIs Project, with more signing on every year!

U4SSC welcomes all cities to start their SSC journey!

For more information, contact:

u4ssc@itu.int

Website:

www.itu.int/en/ITU-T/ssc/

Access the U4SSC KPIs methodology at:

www.itu.int/en/publications/Documents/tsb/2017-U4SSC-Collection-Methodology/mobile/index.html

Thank you!