

# Assisting Smart Cities and Communities in ISO 37120 Certification and Smart Sustainable Governance

International Program 2019

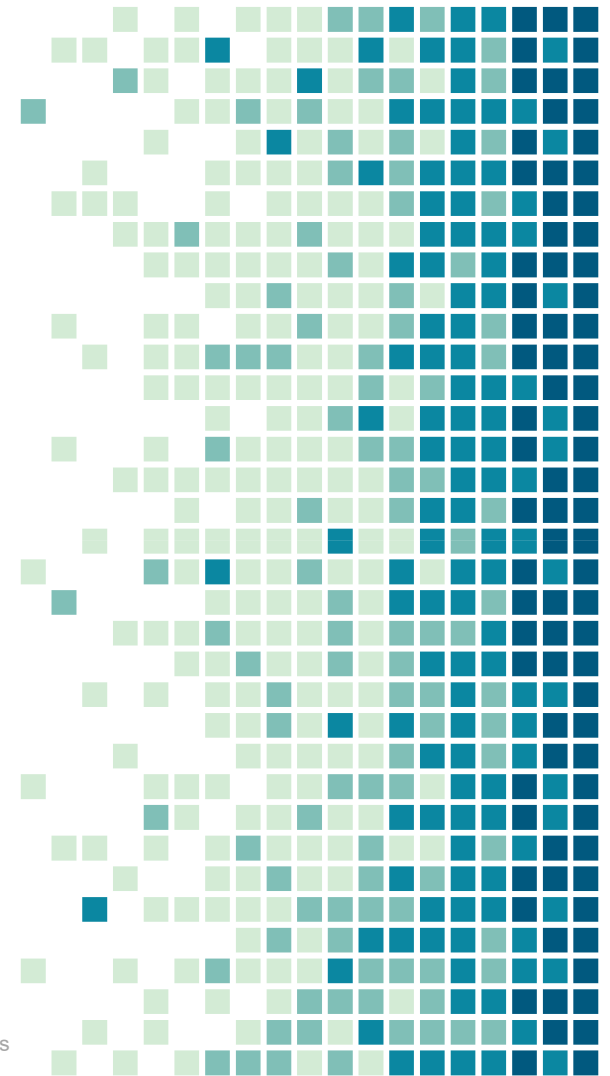


ISO 31720:2018 Certification Assistance Program for Smart Cities and Communities

# 1. INTRODUCTION



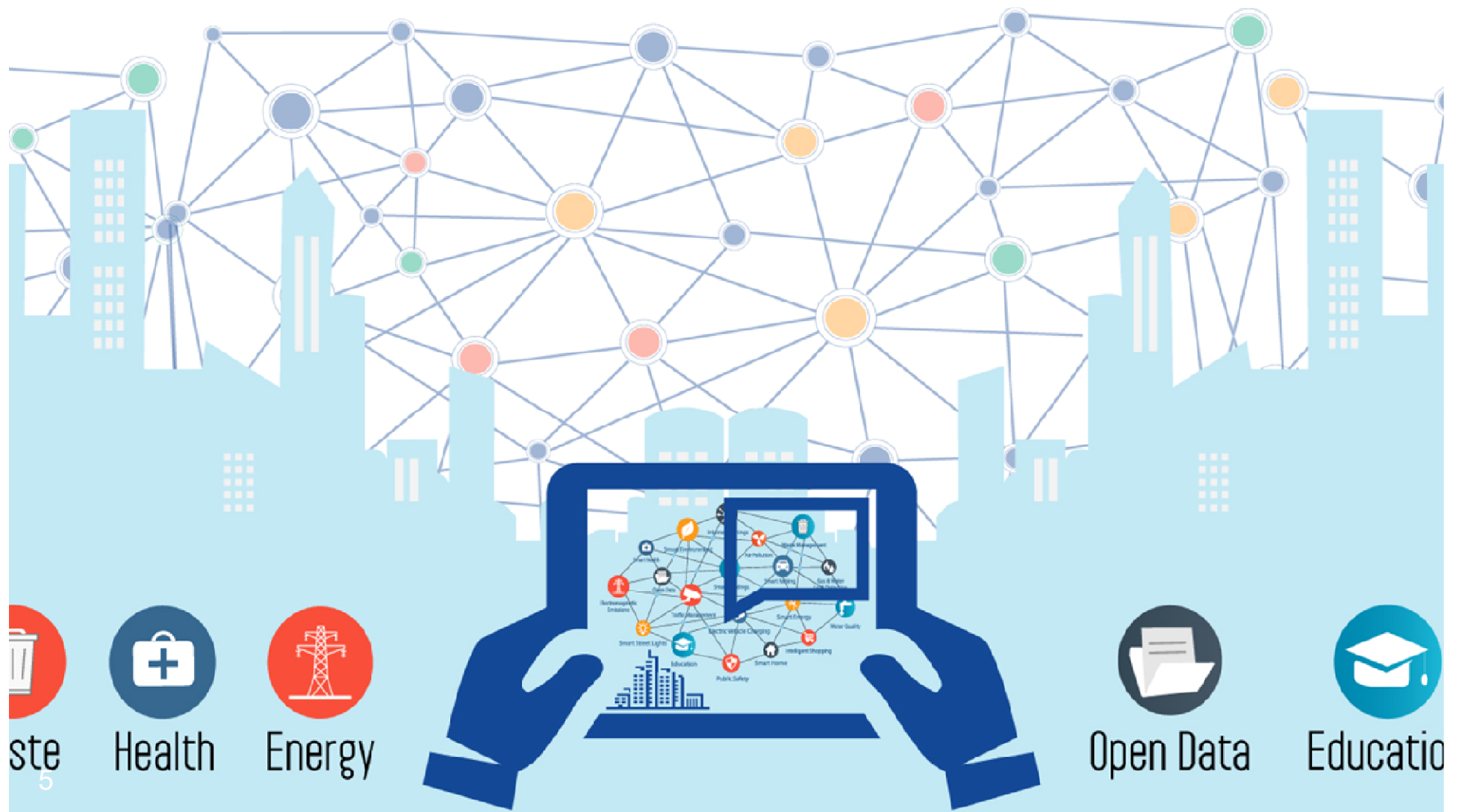
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# OBJECTIVES

- Support certification needs of city administrations with novel digital transformation technology Smart City Monitor with easy presentation of city performance in compliance with key international standard ISO 37120 Sustainable development of communities - Indicators for city services and quality of life
- Simplify and decrease costs of the certification in compliance with the standard and increase its practical value for cities
- Make the standard working in daily life to assist community administrations in smart sustainable management and governance and transparency of its achievements

“ *International Standard ISO 37120:2018 Establishes a set of standardized Core, Supporting and Profile indicators that provide a uniform approach to what is measured, and how that measurement is to be undertaken (iso.org)*



# ISO 37120:2018 Themes

Economy  
Education  
Energy  
Environment and climate change  
Finance  
Fire and Emergency Response  
Governance  
Health  
Housing  
Population and social conditions  
Recreation

Safety  
Solid Waste  
Sport and culture  
Telecommunications  
Urban Planning  
Transportation  
Urban/local agriculture and  
food security  
Urban planning  
Wastewater  
Water

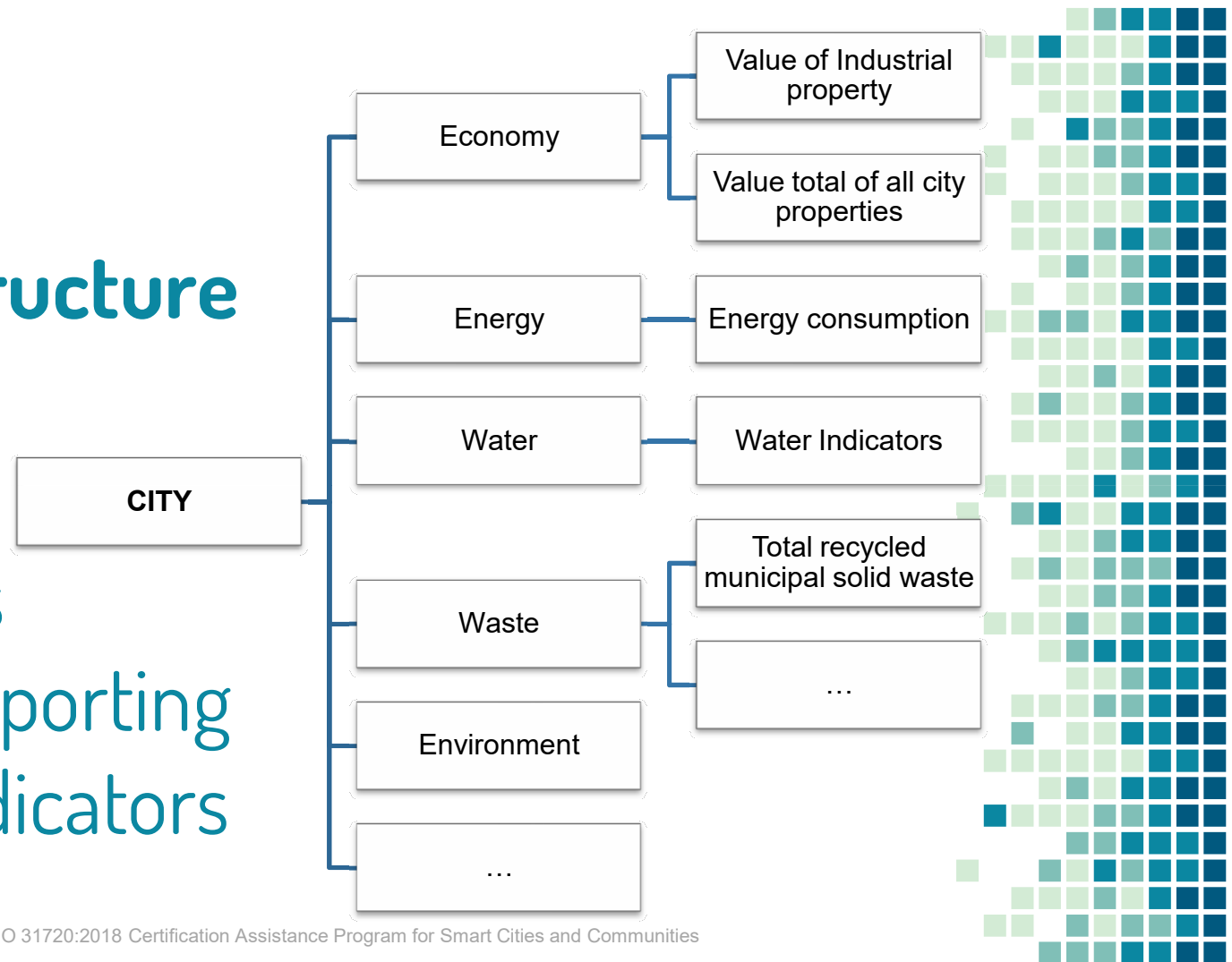


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# ISO 37120 Structure

19 themes  
as focus areas  
with core, supporting  
and profile indicators



# Sustainability, Performance Transparency in real time

In assisting cities in steering and assessing the performance management of city services and all service provisions, the novel **CityMonitor 37120** running on technology solution **Smart City Monitor** presents comprehensive set of all 19 sectors and services accordingly to ISO 37120.

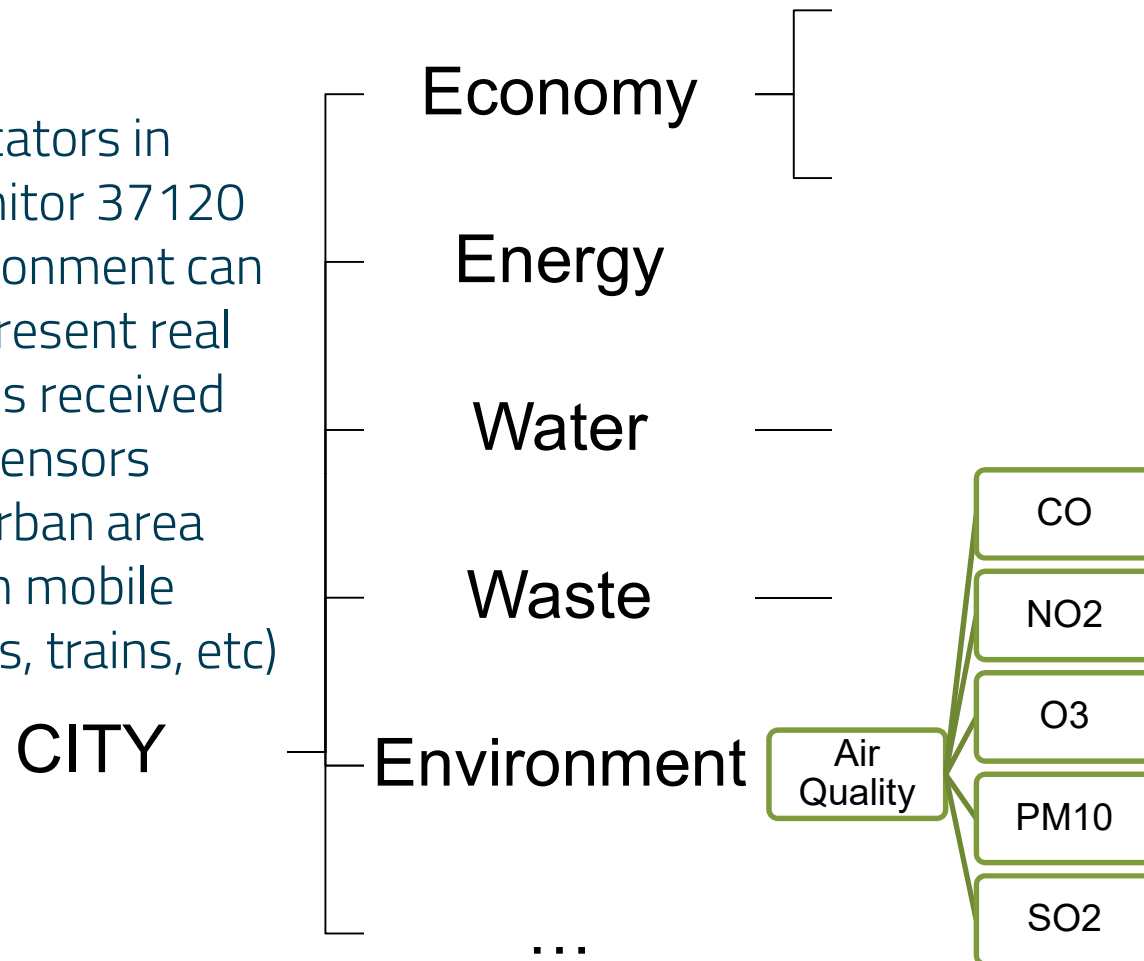
It is **open to adding and upgrading** with any necessary local indicators and city infrastructure objects that are required to assist in smart city management effectively.



Events ...	Navigate	Prefere...	Help
Monitor ISO 37120 ▾			
Object Name	Status		
Smart City Municipality	☂	🌐	
Urban Planning	🌲		
Fire and emergency response	🔥		
Shelter	🛖		
Energy	⚡	🌐	
Transportation	A		
Education	🎓	🌐	
Water and Sanitation	💧	🌐	
Wastewater	🧪		
Telecommunication and innovation	📶		
Solid waste	🗑️		
Safety	🔒		
Health	🏥	🌐	
Governance	🏛️		
Environment	🌿	🌐	
Economy	📈		
Finance	💰	🌐	

### Example:

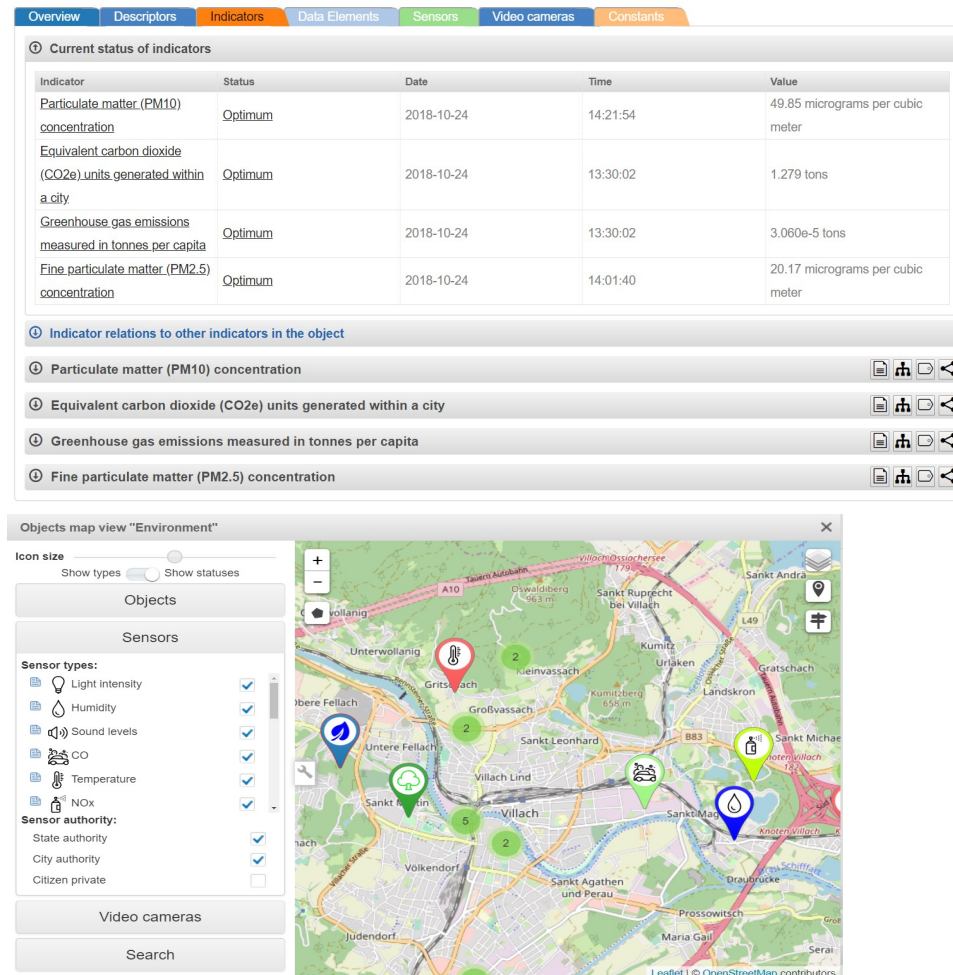
Air Quality indicators in Smart City Monitor 37120 report for Environment can calculate and present real time data that is received from multiple sensors distributed in urban area and installed on mobile vehicles (busses, trains, etc)



# CityMonitor 37120 Environment

Providing  
administrations and  
citizens with  
environmental  
information in real  
time for any specific  
location and the city as  
a whole

## Report for "Environment"

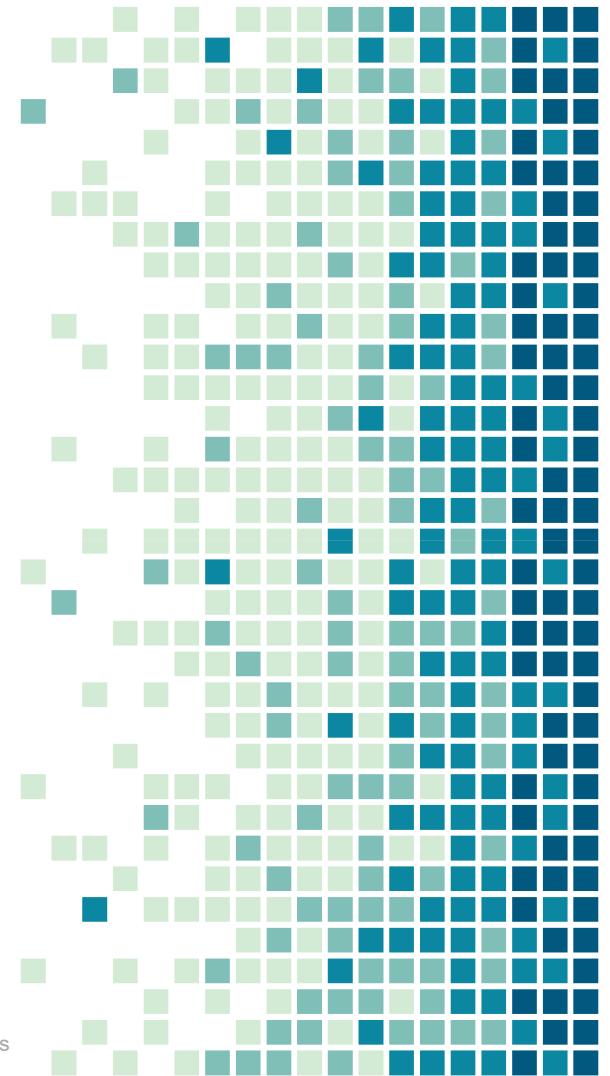


# 2.

## THE TECHNOLOGY



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# Smart City Monitor 37120 dashboard

- Principally new powerful interactive tool assisting in smart governance by administrations and utility providers
- Presenting achievements that are transparent and verifiable online to let continuing auditing
- Fostering continuous improvements in real time
- Introducing operational compliance with standards in daily work ( contrary to paper certificates on the city hall wall)



# TECHNOLOGY COMPONENTS

## CITY MODEL

by ISO 37120 represents all major urban processes and typical infrastructure in 19 schematic themes above 60 indicators offering holistic and integrated approach to sustainable governance and development

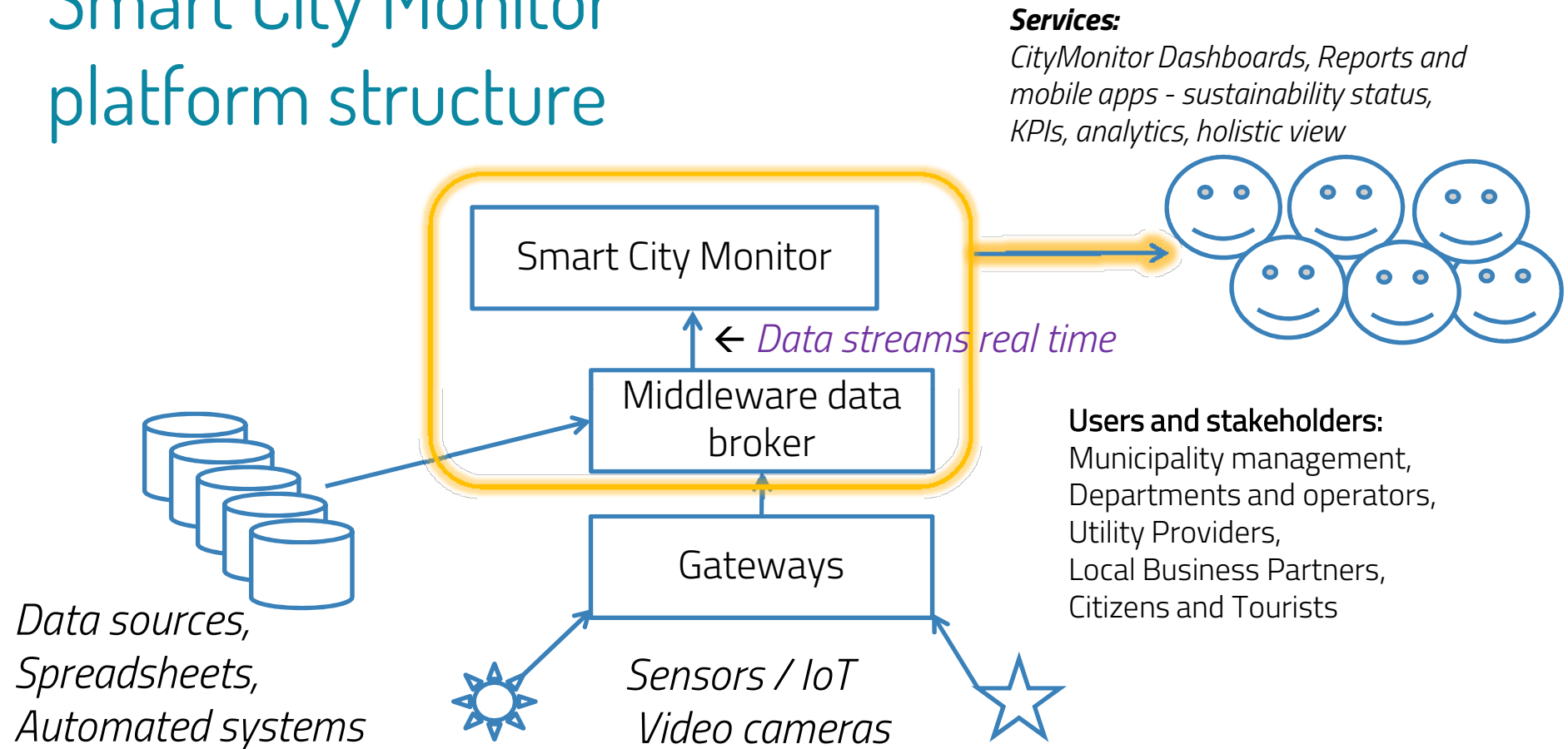
## CITY DATA

is prepared by the responsible city departments and organisations in MS Excel files monthly or weekly accordingly to ISO 37120 requirements

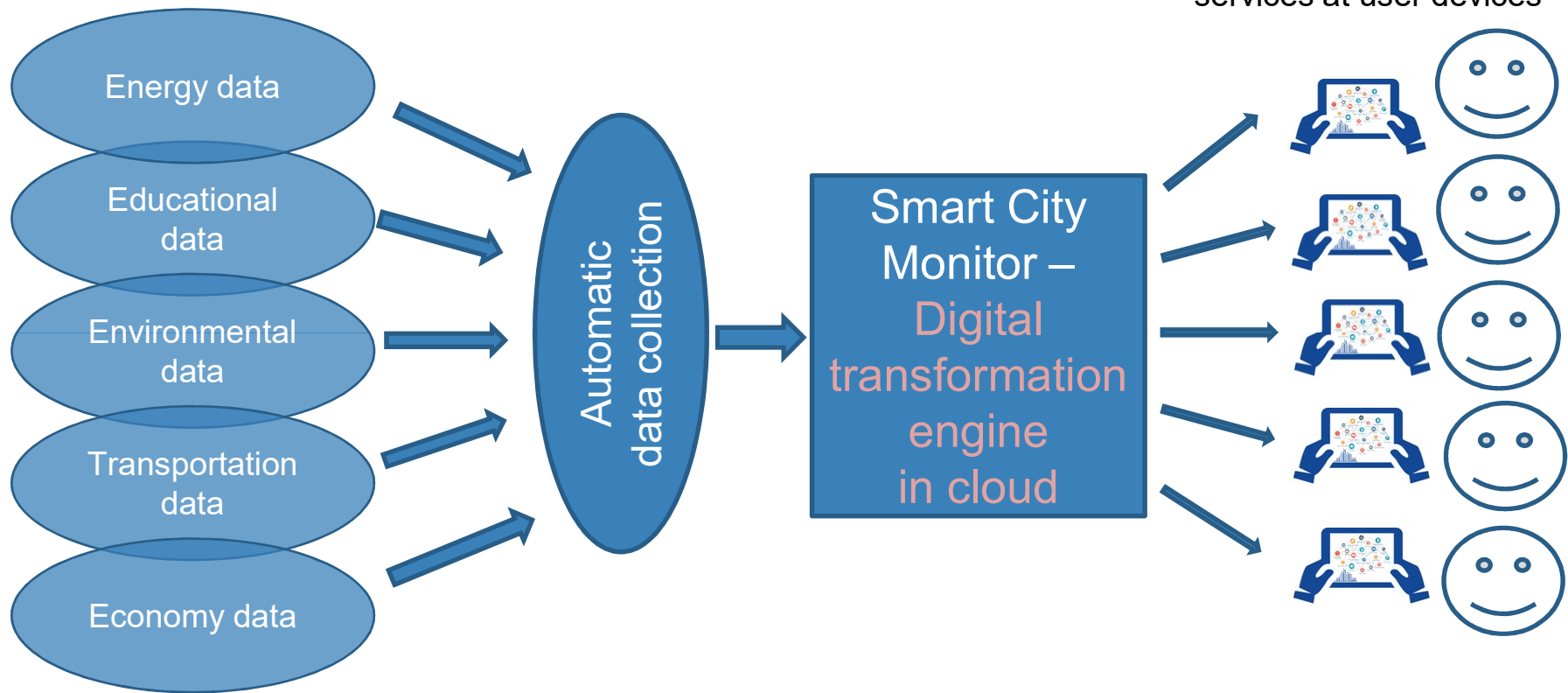
## SMART CITY MONITOR

High level AI-driven IoT technology platform automatically collecting big data from large number of data sources and its digitally transforming into custom information services for stakeholders in real time

# Smart City Monitor platform structure



# Holistic core operations



\* \* \* Various heterogeneous urban data sources

# Analytics on common user devices!

## Notebooks



## Tablets

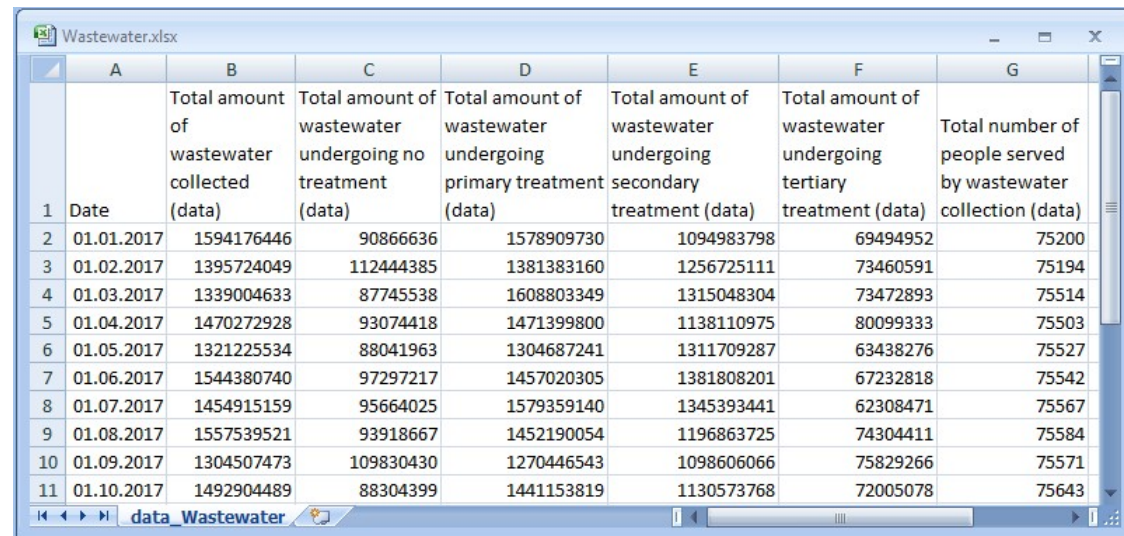


## Mobiles



# Example of source data in MS Excel

Waste water  
city data by  
ISO 37120 in  
MS Excel  
spreadsheet



	A	B	C	D	E	F	G
		Total amount of wastewater collected (data)	Total amount of wastewater undergoing no treatment (data)	Total amount of wastewater undergoing primary treatment (data)	Total amount of wastewater undergoing secondary treatment (data)	Total amount of wastewater undergoing tertiary treatment (data)	Total number of people served by wastewater collection (data)
1	Date						
2	01.01.2017	1594176446	90866636	1578909730	1094983798	69494952	75200
3	01.02.2017	1395724049	112444385	1381383160	1256725111	73460591	75194
4	01.03.2017	1339004633	87745538	1608803349	1315048304	73472893	75514
5	01.04.2017	1470272928	93074418	1471399800	1138110975	80099333	75503
6	01.05.2017	1321225534	88041963	1304687241	1311709287	63438276	75527
7	01.06.2017	1544380740	97297217	1457020305	1381808201	67232818	75542
8	01.07.2017	1454915159	95664025	1579359140	1345393441	62308471	75567
9	01.08.2017	1557539521	93918667	1452190054	1196863725	74304411	75584
10	01.09.2017	1304507473	109830430	1270446543	1098606066	75829266	75571
11	01.10.2017	1492904489	88304399	1441153819	1130573768	72005078	75643

The 20 spreadsheet files for ISO 37120 urban model are periodically updated by different organisations and city departments e.g. monthly. Smart City Monitor automatically imports all of them from different city locations, servers, Google docs, Dropbox, etc to calculate KPIs and its presenting at Monitoring Dashboard

Administrations have trustful answers at any time and in any place and in real time

*How are  
you now  
my city?*

- Smart City Monitor 37120 dashboard presents the holistic indicators for city services and quality of life by ISO 37120. It is open for adding any locally defined custom indicators to measure performance management and sustainability.
- It supports policy development, priority setting applicable to any local government that wants to measure its performance in a comparable and verifiable manner, irrespective of size and location enabling continuous improvements and audit of quality of life.

Welcome to begin your journey to Smart  
Sustainable Governance and ISO 37120  
certification for your city !

You can find us by:  
[info@asides.org](mailto:info@asides.org)  
<http://asides.org>

# CREDITS

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by [SlidesCarnival](#)
- Photographs by [Unsplash](#)
- Photographs from the municipalities sites.

This presentation uses the following typographies and colors:

- Titles: **Dosis**
- Body copy: **Titillium Web**

You can download the fonts on these pages:

<http://www.impallari.com/dosis>

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Pastel green #d3ebd5 • Green #80bfb7 • Teal #0b87a1 • Navy #01597f • Dark navy #003b55

ASIDEES

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