

5 YEARS FORWARD: GCC SMART CITY SOLUTIONS

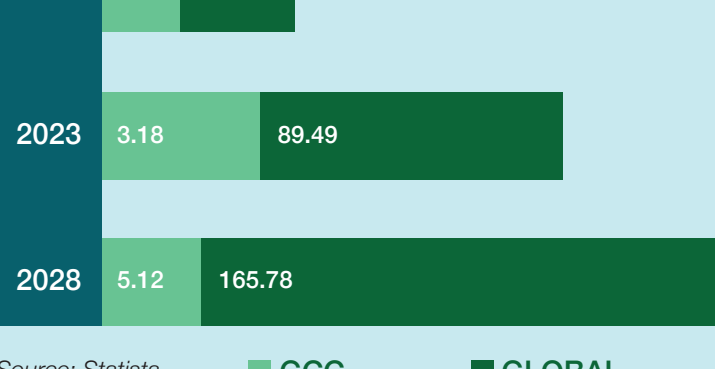
AN EXCLUSIVE REPORT FOR THE WORLD FUTURE ENERGY SUMMIT BY FROST & SULLIVAN

By the **end of 2028**, the number, size and scale of GCC smart cities will be greatly accelerated, based on the rapid development of key technologies and solutions that are bringing the dream of true **smart city living** to life.

What exactly is driving the growth of smart cities in the GCC?

Where are the new opportunities and growth drivers? And what, if anything, might stop or slow the rise of this revolutionary type of urban environment?

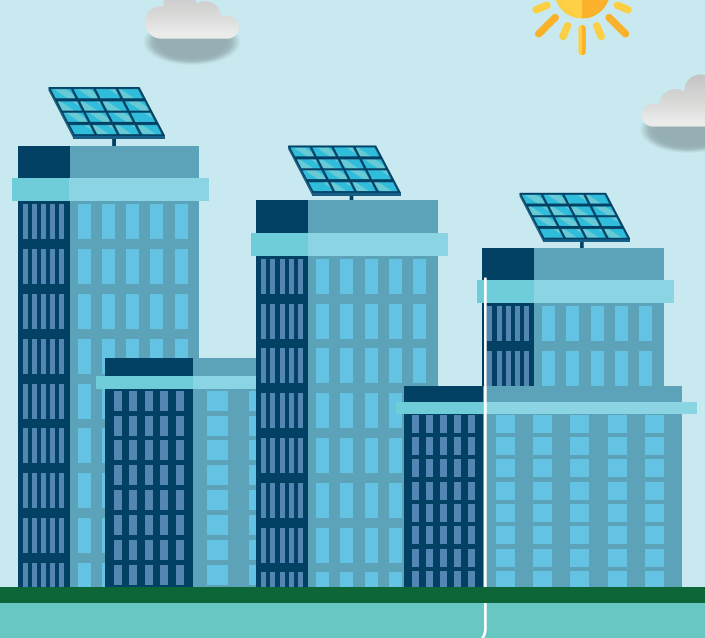
SMART CITY SOLUTION INDUSTRY SIZE (BN) AT A GLANCE



Source: Statista

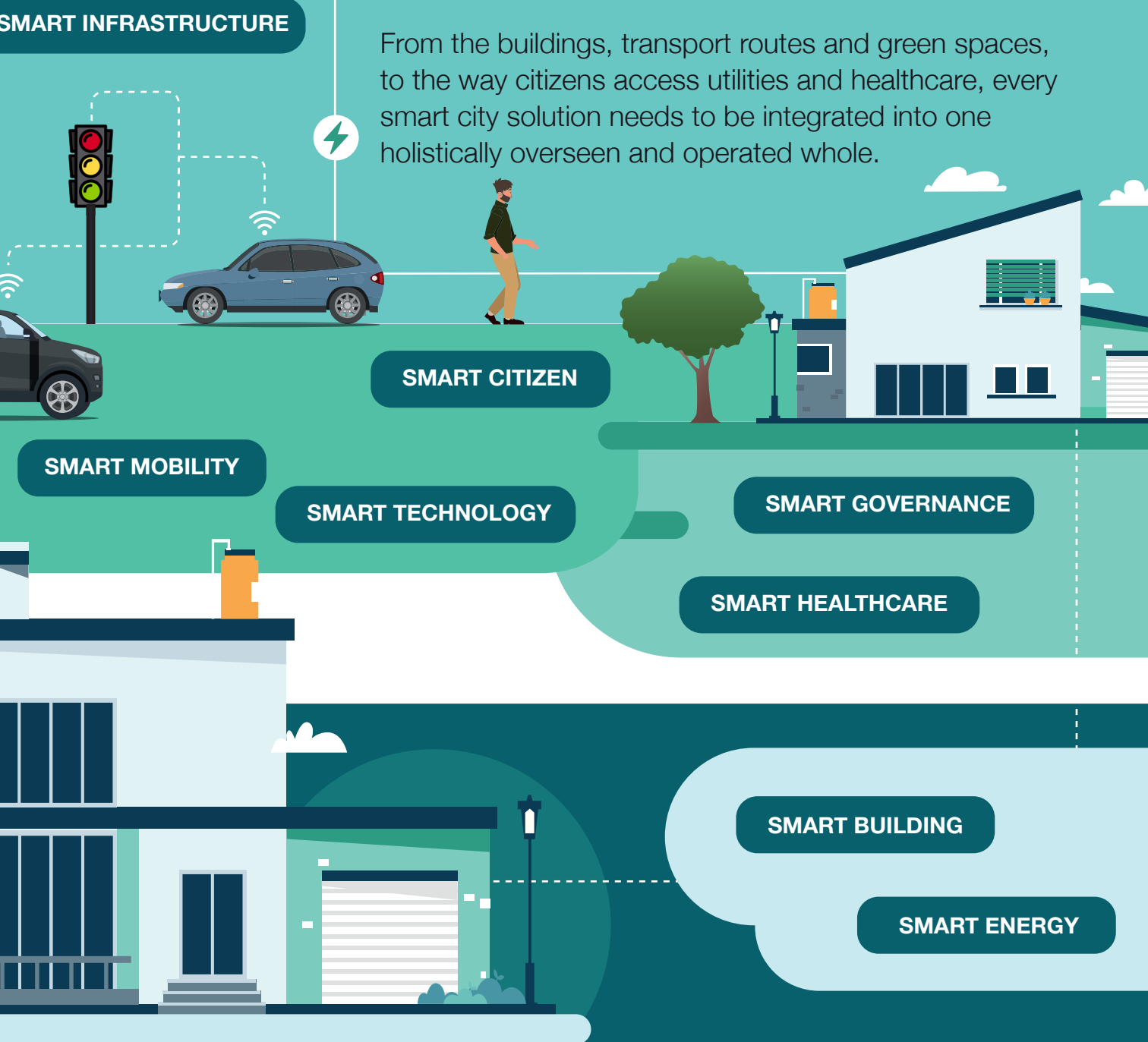
GCC

GLOBAL

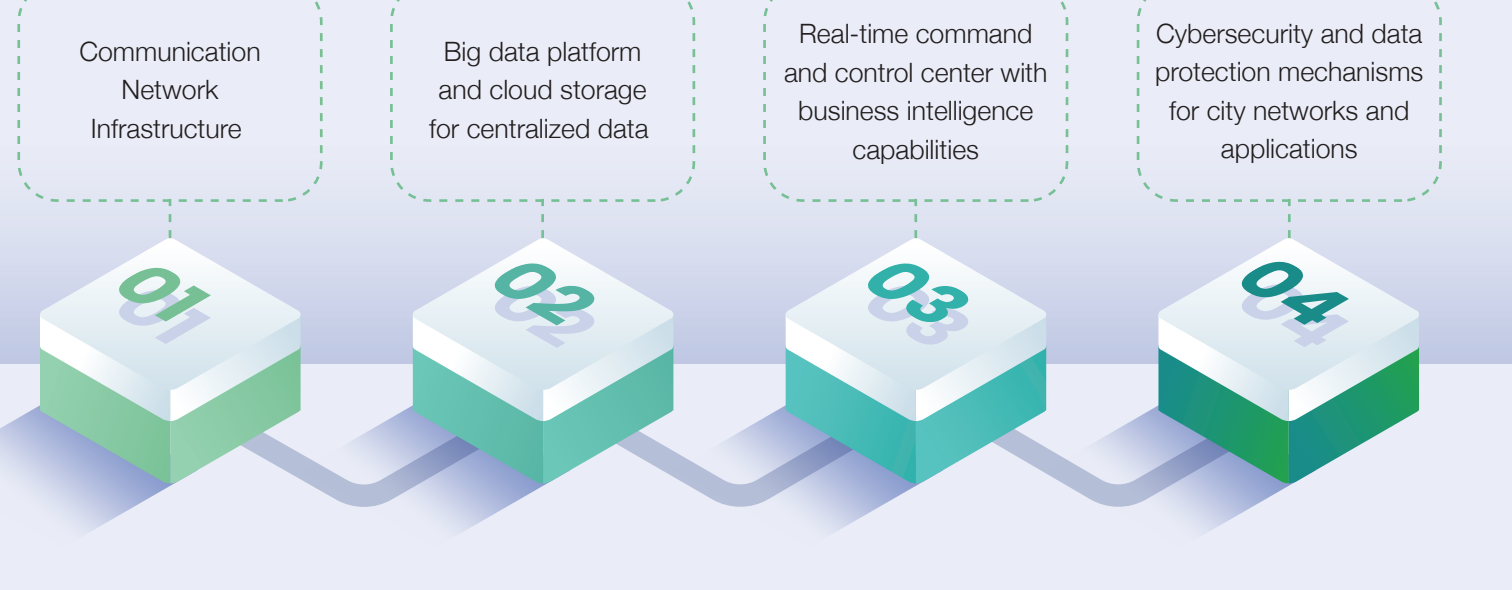


SMART CITIES: INNOVATION MEETS URBAN LIVING

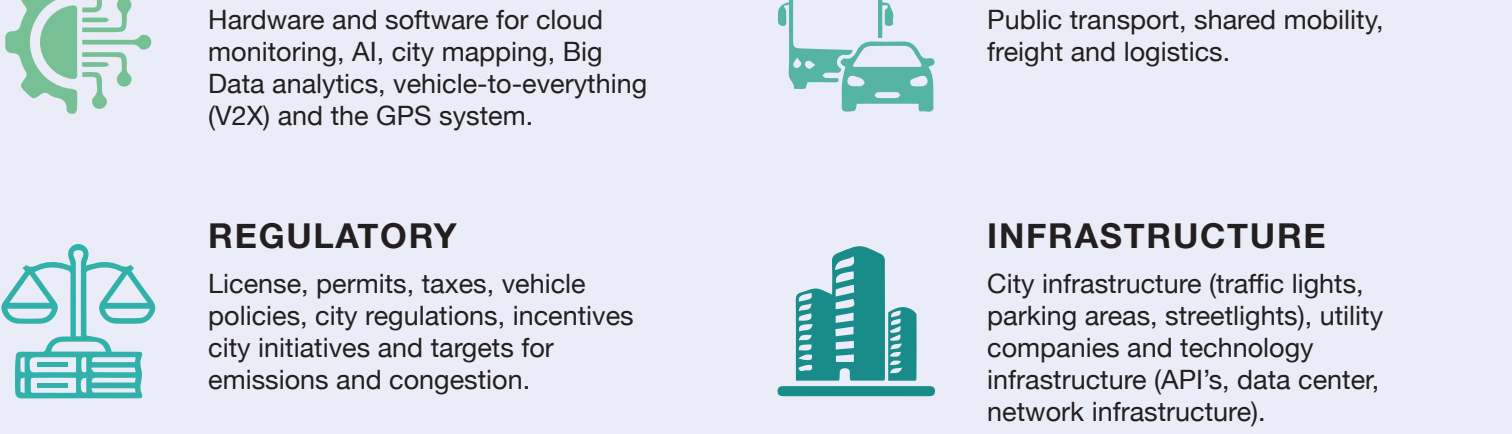
From the buildings, transport routes and green spaces, to the way citizens access utilities and healthcare, every smart city solution needs to be integrated into one holistically overseen and operated whole.



WHAT ELEMENTS ARE NEEDED TO MAKE A CITY TRULY SMART?



WHAT LAYERS ARE INVOLVED?



WHAT WILL SLOW OR SPEED UP GCC SMART CITY GROWTH?

SMART CITY SOLUTIONS KEY GROWTH DRIVERS (2023-2035)

DURATION IN YEARS

1 - 2 3 - 4 5 - 14

Investments in telecommunication networks (5G standards) and high smartphone penetration will drive growth in digitising city infrastructure and services.	HIGH	HIGH	HIGH
The advancement in the sensor industry - the miniaturisation of technology (smaller, cheaper, simpler, and low-power consumption) to connect more objects to a smart city network.	HIGH	HIGH	HIGH
Public and government funding that will aid smart city programmes aimed at increasing the efficiency of city utilities, public safety and improving the quality of life.	MEDIUM	HIGH	HIGH
Increasing the automation of administrative tasks such as reducing the manpower necessary for the operational management of the city.	MEDIUM	MEDIUM	MEDIUM
Private participation and investment which will create new services and delivery models that sit on top of smart city platforms.	LOW	MEDIUM	MEDIUM

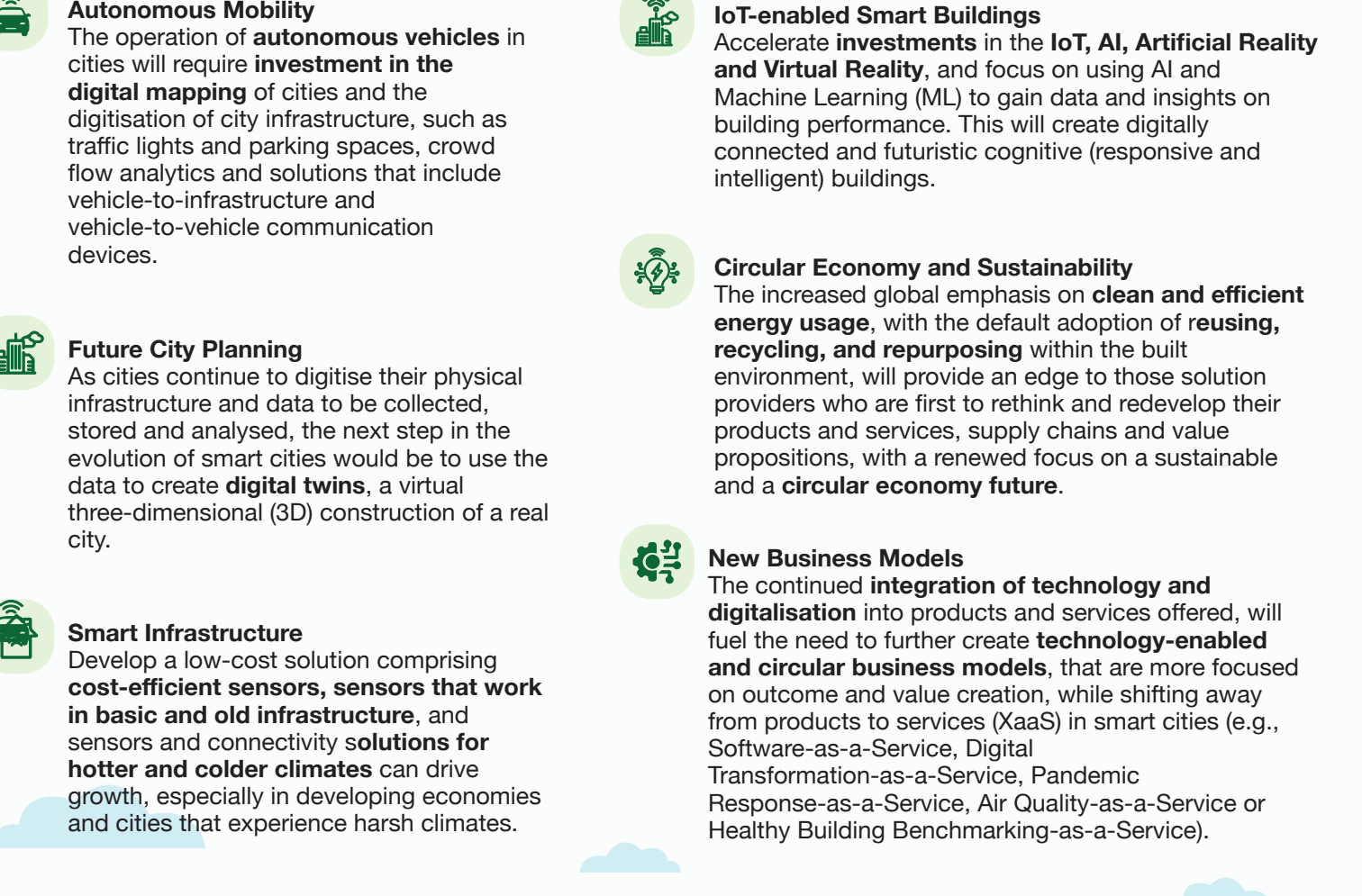
SMART CITY SOLUTIONS KEY GROWTH RESTRAINTS (2023-2035)

DURATION IN YEARS

1 - 2 3 - 4 5 - 14

Cost Installing a comprehensive smart city solution is prohibitive for smaller urban areas and cities in developing economies.	HIGH	HIGH	HIGH
Data privacy concerns These will need to be addressed at a faster pace.	HIGH	HIGH	HIGH
Digitisation Digitising all public utility services, risks marginalising the poorest or technologically challenged sections of society.	MEDIUM	HIGH	HIGH

WHERE WILL GCC CITIES NEED TO FOCUS?



WHAT'S NEXT FOR GCC SMART CITIES?

Global urbanisation, with all its emergent needs and current shortcomings, make the development of smart cities a necessity, not a choice. GCC smart cities will keep evolving, with a particular focus on being wholly sustainable to counter the acute risks and public health factors the region faces.

Genuine smart city planning, delivered while engaging with communities and carrying out diligent monitoring and continuous improvement, will allow GCC cities to become truly sustainable, while unlocking the full potential of the integrated solutions that underpin their development.

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