SMART SOLUTIONS FOR SMART CITIES

Smart monitors and controls across all aspects of city life are set to transform the urban landscape

- Transport
- Infrastructure
- Environment
- Utilities
- Buildings
- Life

01 GREEN BUILDINGS
Rooftop gardens or vegetation on the side of buildings to help insulation, absorb CO_2 and produce oxygen

02 BUILDING MANAGEMENT
Automation and optimisation of services such as heating, energy usage, lighting and ventilation

03 PERIMETER ACCESS CONTROL
Controlling access and monitoring of restricted areas with CCTV, intruder detection and alarms

04 ROOFTOP WIND TURBINES
Wind turbines built on top of high-rise buildings or integrated into the building design itself

05 AIR POLLUTION CONTROL
Controlling CO_2 emissions of factories and monitoring car pollution

06 BUILDING-INTEGRATED PHOTOVOLTAICS
Solar panels integrated into the building fabric to replace conventional materials

07 SMART GRID
Energy consumption monitoring and management

08 CHEMICAL LEAKAGE DETECTION
Detecting leakages and waste of factories in rivers

09 REAL-TIME UPDATES
Instant traffic updates sent to smartphones to help route-planning and avoid congestion

10 VERTICAL-AXIS WIND TURBINES
Helical twisted wind turbine towers across the city for efficient use of space

11 WASTE MANAGEMENT
Monitoring rubbish levels in containers to optimise refuse collection routes

12 SMART PARKING
Monitoring availability of parking spaces across the city

13 EARTHQUAKE EARLY DETECTION
Monitoring specific places susceptible to tremors

14 POTABLE WATER MONITORING
Monitoring the quality of tap water across the city

15 WI-FI
Citywide free wi-fi for public use, including wi-fi on the Tube/Metro

16 WATER LEAKAGE DETECTION
Detecting liquid presence outside tanks and pressure variations along pipes

17 LANDSLIDE AND AVALANCHE PREVENTION
Monitoring soil moisture, vibrations and earth density

21 ELECTRIC TRANSPORT
Electric vehicles and public transport, with charging stations across the city

22 STRUCTURAL HEALTH
Monitoring vibrations/material conditions in buildings and infrastructure

23 FIRE SAFETY
Fire detection and intelligent extinguishing tailored to each room

SMART LIGHTING
Intelligent and weather-adaptive streetlights

TRAFFIC CONTROL/ SMART ROADS
Monitoring vehicles/pedestrian levels to optimise or divert traffic according to conditions

FAST LANES
Intelligent, adaptive fast and slow lanes for walking and cycling