

MEXOM

VINCI
ENERGIES

J&P RICHARDSON
INDUSTRIES
Electrical Contractors & Engineers



ACT Smart Lighting

SUSTAINABLE TERRITORIES

SUSTAINABLE CITIES ARE SMART CITIES

Michael Rosetta – Business Development Manager

ACT SMART LIGHTING SUSTAINABLE TERRITORIES

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VINCI ENERGIES
OVERVIEW

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ACT SMART LIGHTING
PROJECT OVERVIEW

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SUSTAINABLE/SMART
CITY FRAMEWORK

04

SUSTAINABLE CITIES
FOCUS



1. VINCI ENERGIES

OVERVIEW



Accelerator of environmental transition

VINCI Energies creates bespoke multi-technical solutions & services for energy, transport and communication infrastructure, as well as buildings, factories and IT systems.



OMEXOM

Omexom: VINCI Energies' brand for energy infrastructures



OUR MISSION:
Achieving the energy transition

OUR PRIORITIES:

- Build low-carbon energy sources and develop the grids
- Promote optimised energy use
- Implement innovative and collaborative solutions



2. ACT SMART LIGHTING PROJECT OVERVIEW




THE ACT
GOVERNMENT IS
COMMITTED TO NET
ZERO EMISSIONS BY
2045

DELIVERABLES	Upgrade 50% luminaires to LED Operation and Maintenance of Network Construction, Operation & Maintenance of Smart Lighting network
NETWORK CONFIGURATION	79,000 columns 83,000 luminaires 1,200 streetlight control cubicles




EMISSION REDUCTION

Reduction in GHG Emissions – Support Zero Emissions Target




COMMUNITY

Benefit public – Social, Economic & Environmental



PRICE

Value for money – Affordability



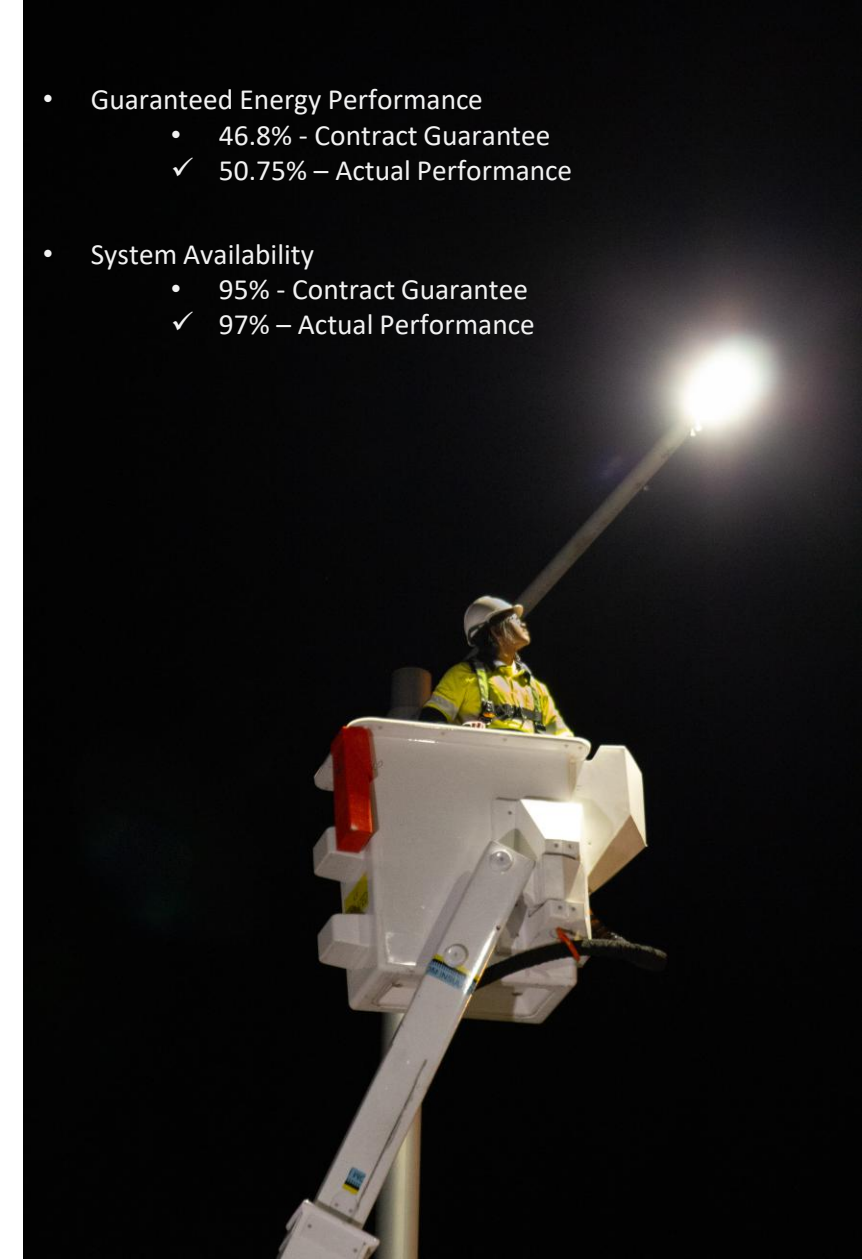
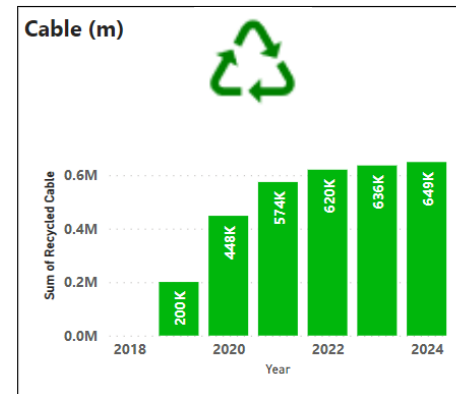
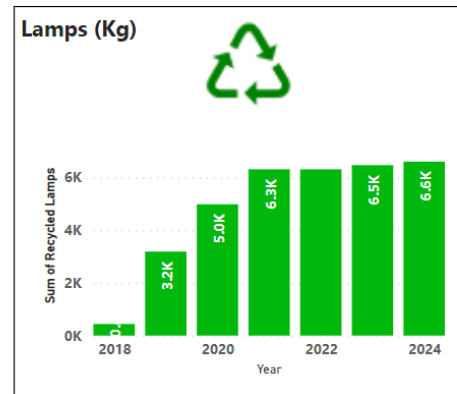
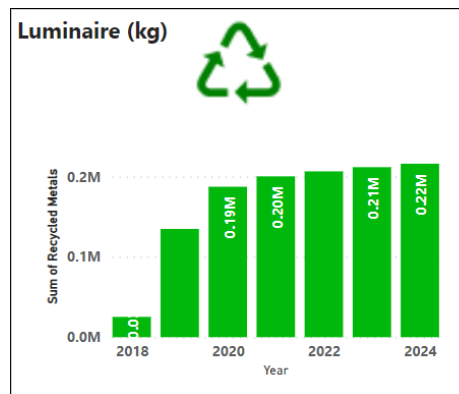
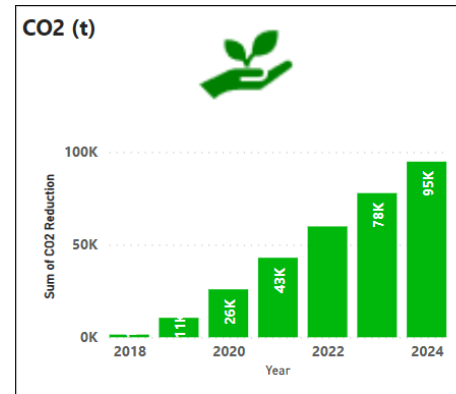
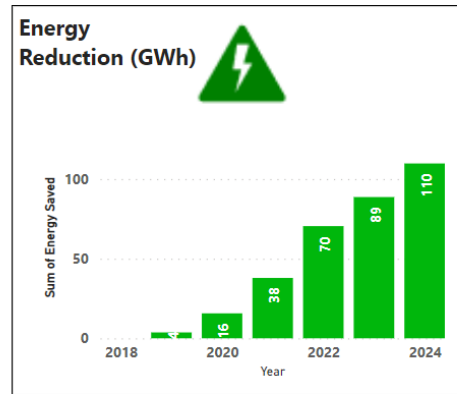
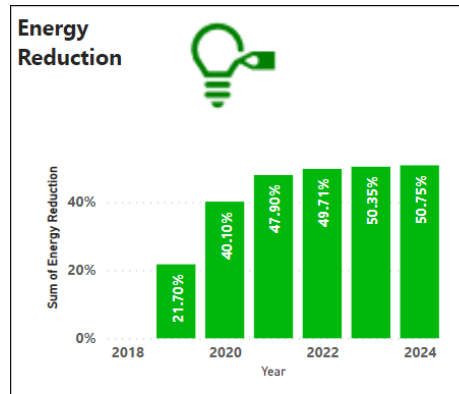
DELIVERY

Appropriate Delivery – Transparent, Accountability and Risk Sharing

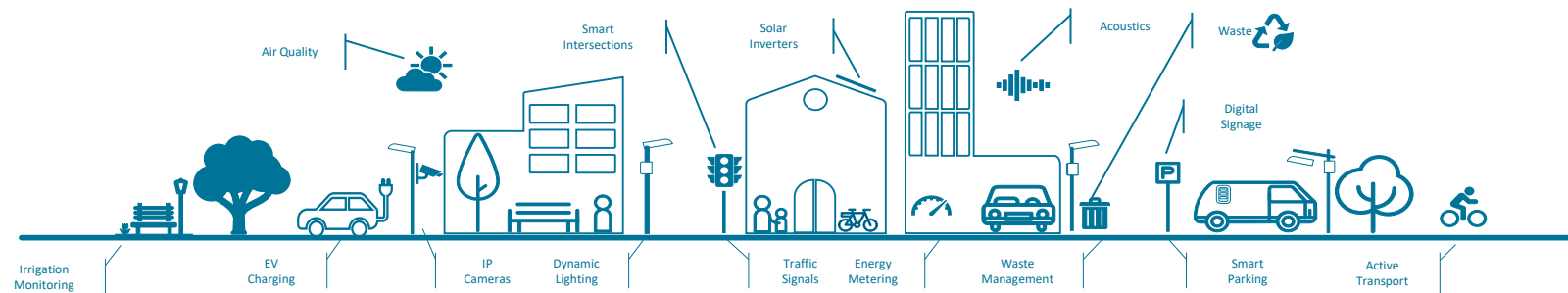
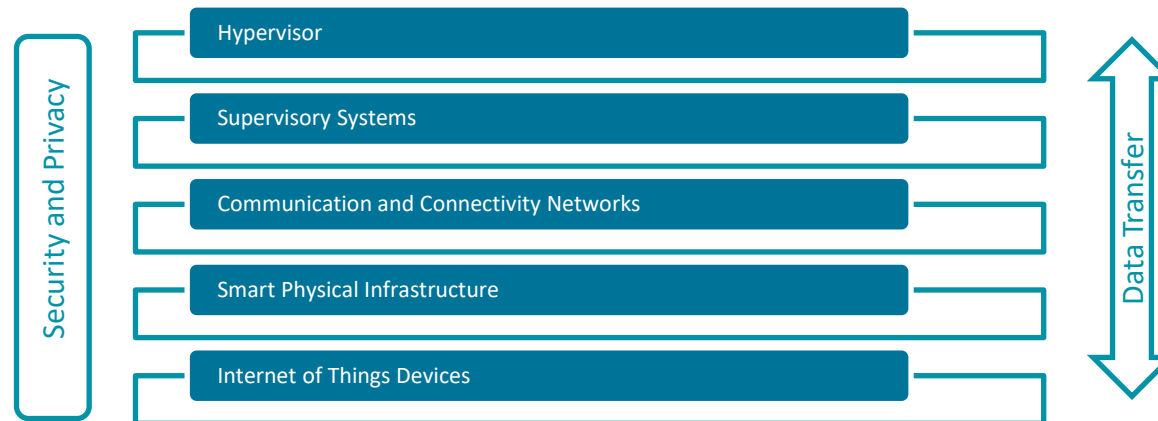


2. ACT SMART LIGHTING PERFORMANCE

- Guaranteed Energy Performance
 - 46.8% - Contract Guarantee
 - ✓ 50.75% – Actual Performance
- System Availability
 - 95% - Contract Guarantee
 - ✓ 97% – Actual Performance

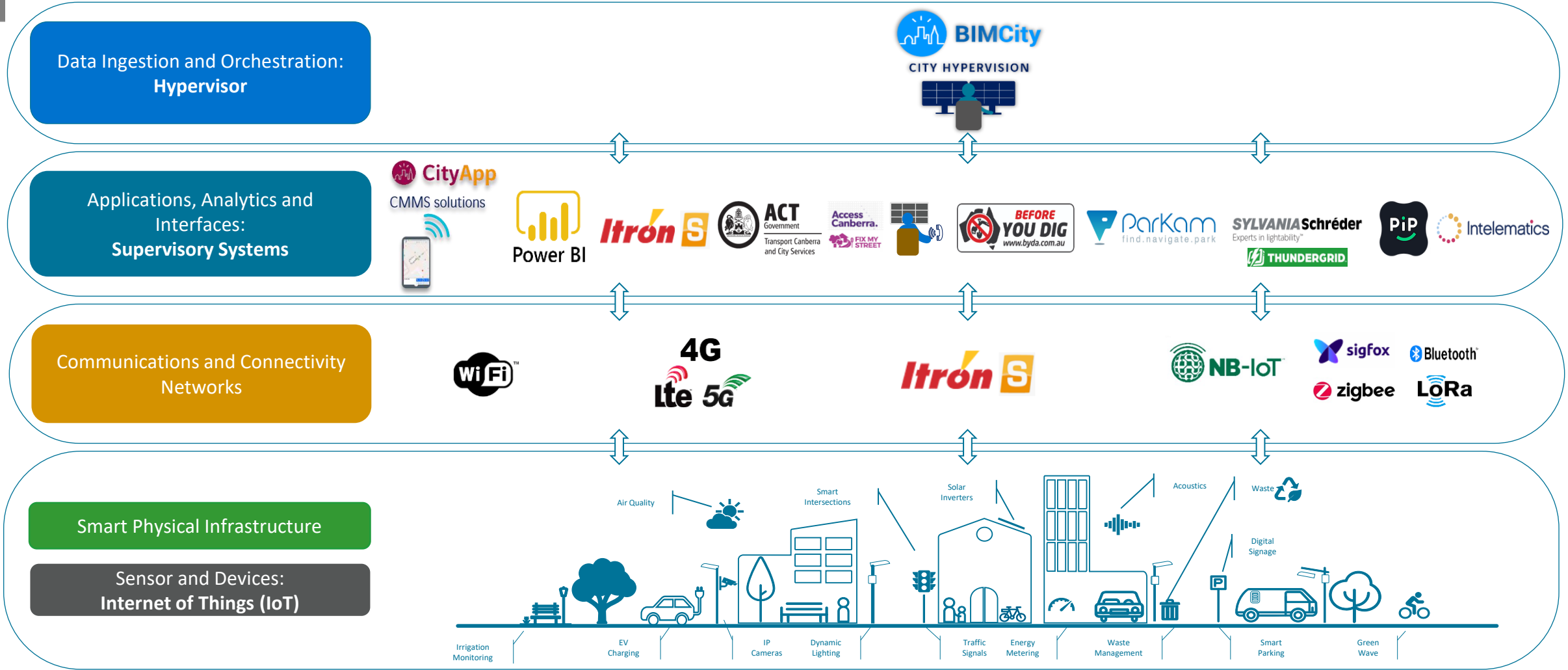


3. SMART/SUSTAINABLE CITY FRAMEWORK



3. SMART/SUSTAINABLE CITY FRAMEWORK

ACT ENVIRONMENT

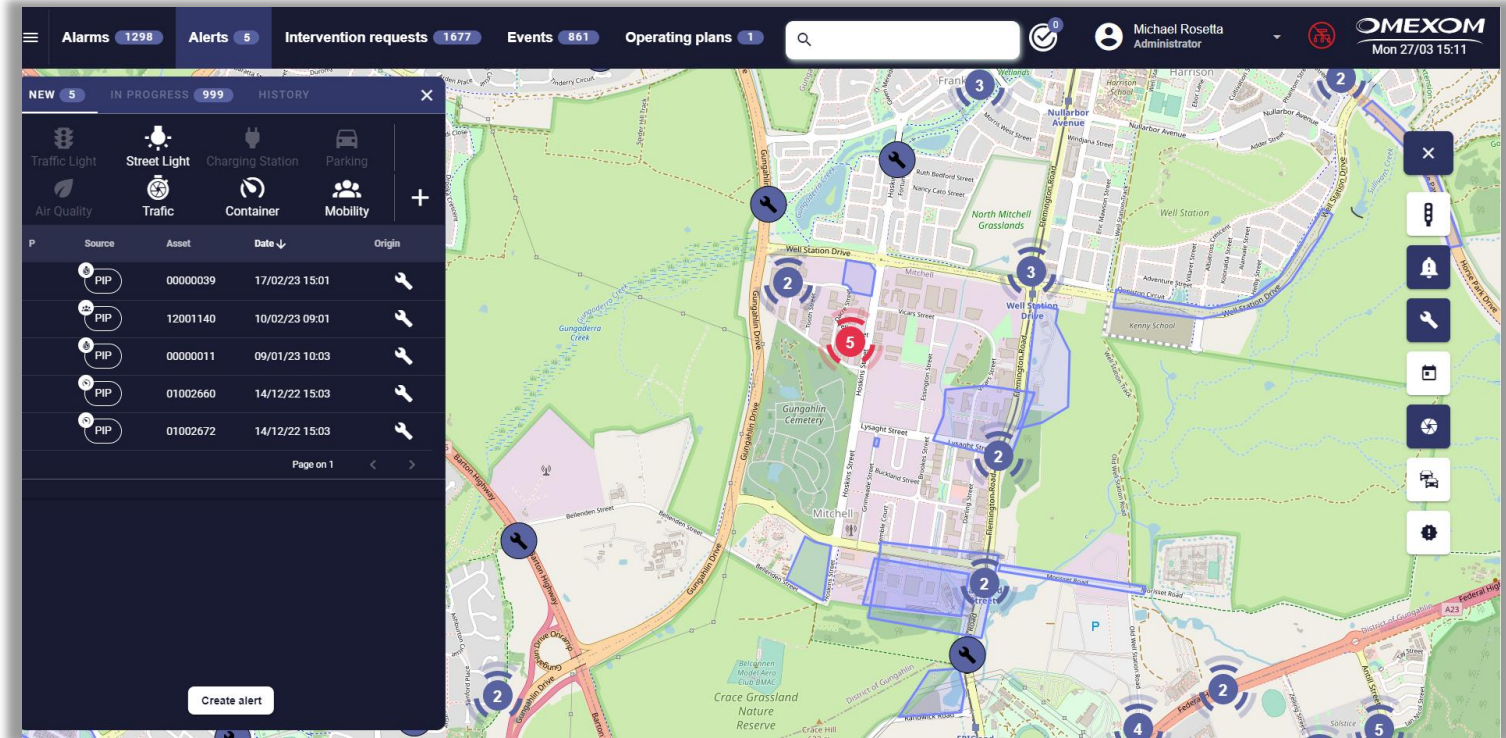


3. SMART/SUSTAINABLE CITY FRAMEWORK

BIMCITY - HYPERVISOR PLATFORM



- Data Ingestion and Orchestration
- Connectivity, data transfer and control of connected supervisory systems
 - Computerised Maintenance Management System (CMMS)
 - Asset Management System
 - Customer Portal
 - Central Management System
 - Realtime Data Analytics
 - Before You Dig
- Sustainable Cities Interfaces
 - Energy & Environmental Transition
 - Sustainable Infrastructure
 - Intelligent Transport Systems
 - Digital Services
 - Safety & Security



Unlocking the true power of city's diverse data streams through data integration, analysis and transformation

4. SUSTAINABILITY

MORE THAN SMART, SUSTAINABLE CITIES ARE OUR FOCUS



Sustainable Cities
are Smart Cities

Cities that are resilient and sustainable in their actions and culture, and by doing so continue to balance the needs and requirements of current and future generations of humans, more-than-humans and the planet without negatively impacting the ecosystems that provide them.

Sustainable Energy Solutions

TARGET 7-3

7 AFFORDABLE AND CLEAN ENERGY

DOUBLE THE IMPROVEMENT IN ENERGY EFFICIENCY

Environmental Transition

TARGET 13-3

13 CLIMATE ACTION

BUILD KNOWLEDGE AND CAPACITY TO MEET CLIMATE CHANGE

Resilient Infrastructure

TARGET 9-1

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

DEVELOP SUSTAINABLE, RESILIENT AND INCLUSIVE INFRASTRUCTURES

Multilevel-Community Engagement and Collaboration

TARGET 11-3

11 SUSTAINABLE CITIES AND COMMUNITIES

INCLUSIVE AND SUSTAINABLE URBANIZATION

Education

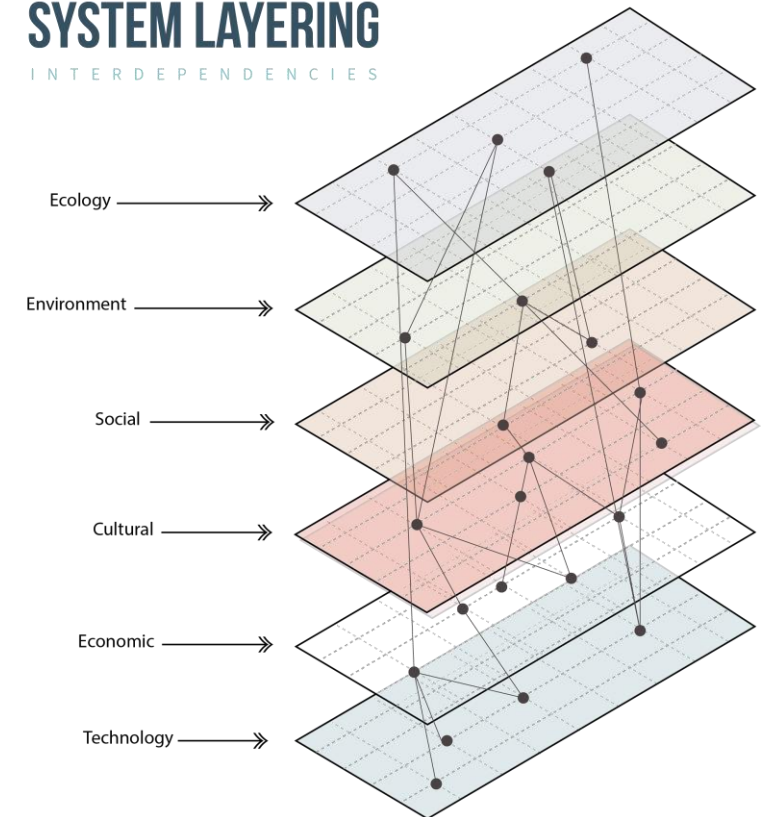
TARGET 4-7

4 QUALITY EDUCATION

EDUCATION FOR SUSTAINABLE DEVELOPMENT AND GLOBAL CITIZENSHIP

SYSTEM LAYERING

INTERDEPENDENCIES



4. SUSTAINABILITY IN ACTION

CCT Modifying Luminaire

Colour Correlated Temperature adaptable luminaire – Smart control

Remote IoT Sensor

Present, Level, Vibration, Impact, Remote Monitoring

Network Integrity

• See next slide

Digital Asset Inspection

Asset digitalization – 3D Modelling, Asset Inspection

Modular EV Streetlight Column

The smart integrated solution to promote the use of electric vehicles

Schröder
Experts in lightability™
Schröder Mobility

Adaptive Lighting



Smart Parking

Estadão Ferrete, Curitiba

Dual Socket Luminaire

Fit-for-Future

Control System Support

- Suitable for (DIN) street City systems
- Available for (DIN) street lighting systems
- (DIN) street lighting systems

Functional design

Designed to meet all the requirements of street lighting applications

Best-in-class LED Technology

Guaranteed performance and reliability guaranteed

Standardised design

Standardised design for all the requirements of street lighting applications

Standardised design for all the requirements of street lighting applications

Environmental Monitoring

Air, Noise, Temperature, etc

Storm Water Monitoring

Water Quality

Water health, dissolved oxygen, turbidity, temperature, pH & conductivity

AQUA WATCH

Intelligent Transport System

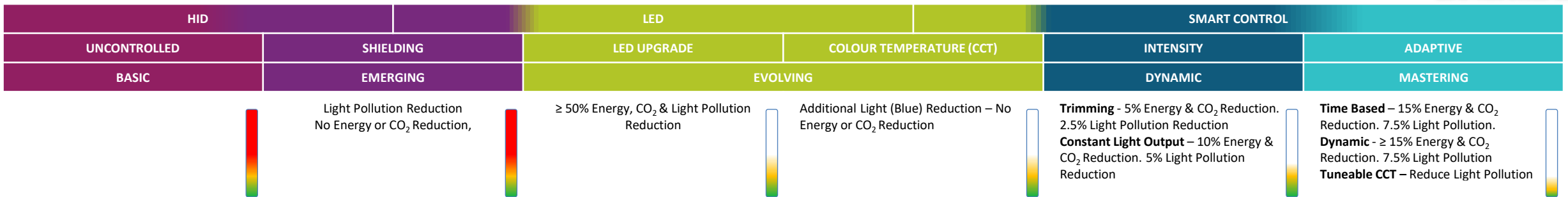
Volume, Speed, Classification, Flow, etc

4. SUSTAINABILITY

Evolution of luminaire to sustainably manage light, emissions & energy



Source: McDonaldObservatory.org



THANK YOU & QUESTIONS

