

We take light beyond illumination to improve your business, organization, and life.

And we're

inspired by you...

We create new value and connected experiences through the world's best quality light. By understanding your needs and desires, we deliver superior and measurable benefits that are meaningful to you.

An aerial night view of a city with a network overlay. The city lights are visible, and a network of white lines connects various points across the image, suggesting a global or interconnected network. The text "Greater Competitiveness" is written in a large, bold, light blue font, and "Light beyond illumination" is written in a smaller, white font below it.

Greater Competitiveness

Light beyond illumination

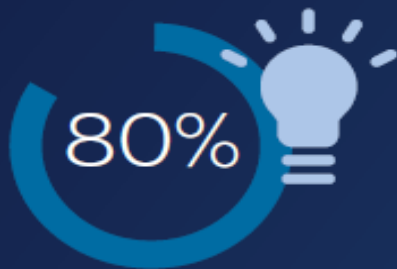
Our promise

**Sustainable products, systems and services will contribute
80% of our revenues by 2020**



Energy efficiency

Connected LED
lighting reduces
energy consumption
by up to 80%



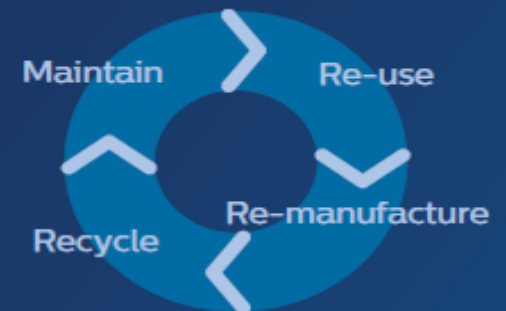
Social benefits

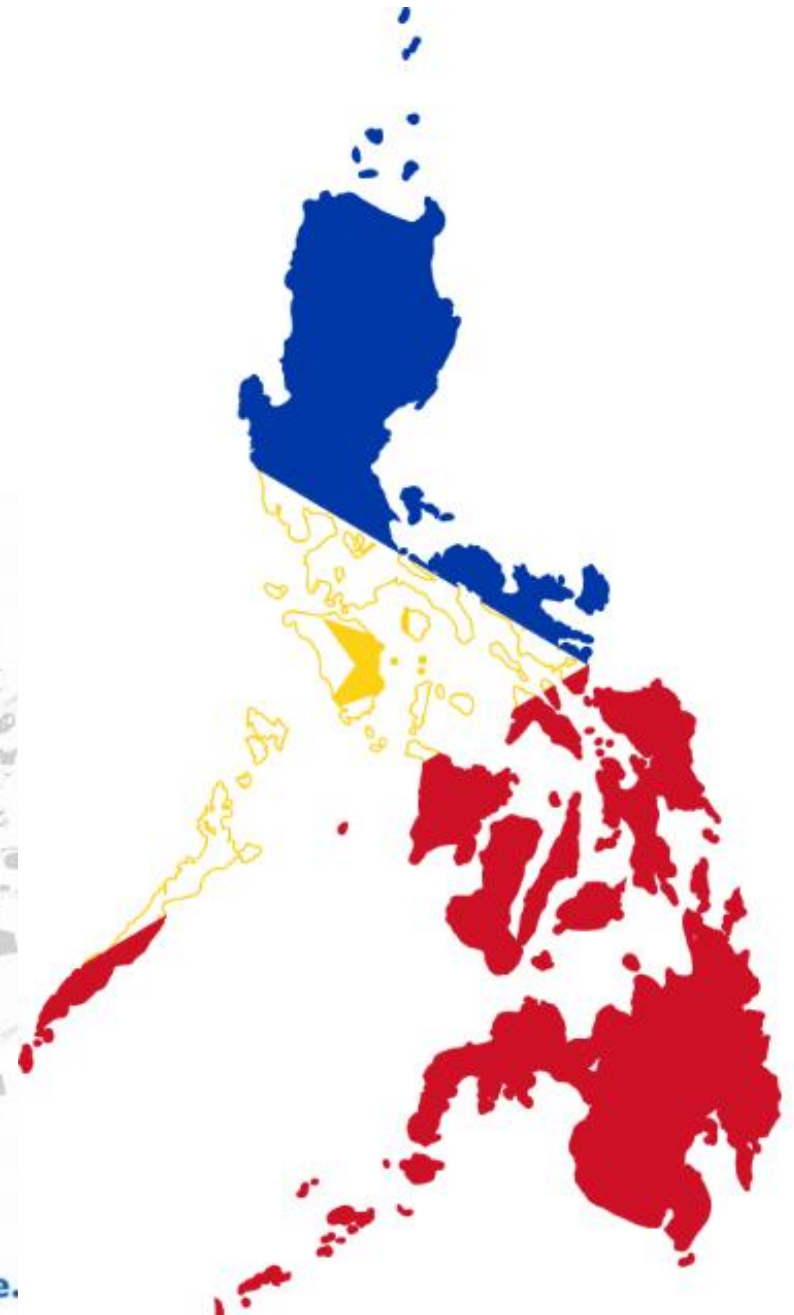
The right light helps
people to see, feel
and function better



Circular lighting

We are leading the
transition to a circular
economy







Good financial
housekeeping



Peace and order



Disaster
preparedness



Environmental
management



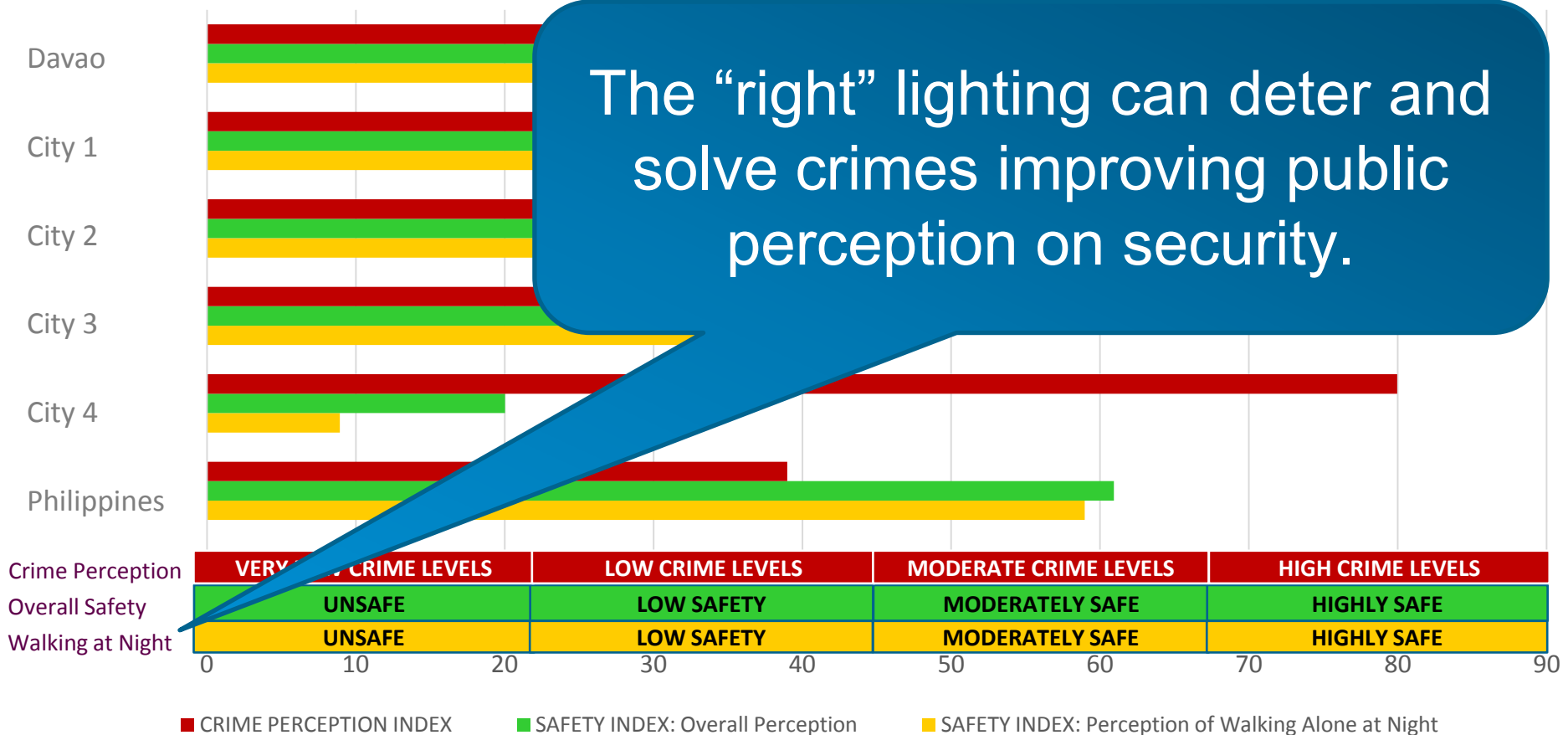
Social protection



Business-friendliness
and competitiveness

PERCEPTION INDEX : OVER-ALL SAFETY & WALKING ALONE AT NIGHT *

The “right” lighting can deter and solve crimes improving public perception on security.



*2016 Crime and Perception Index (www.numbeo)

Lighting can bring competitiveness to a city ... only if executed correctly.

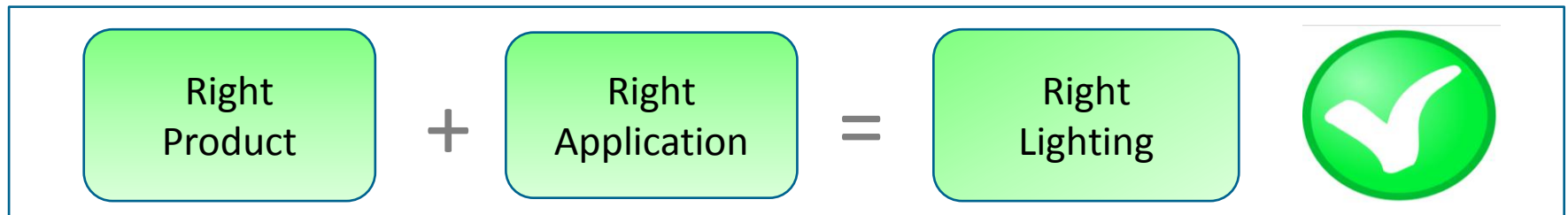
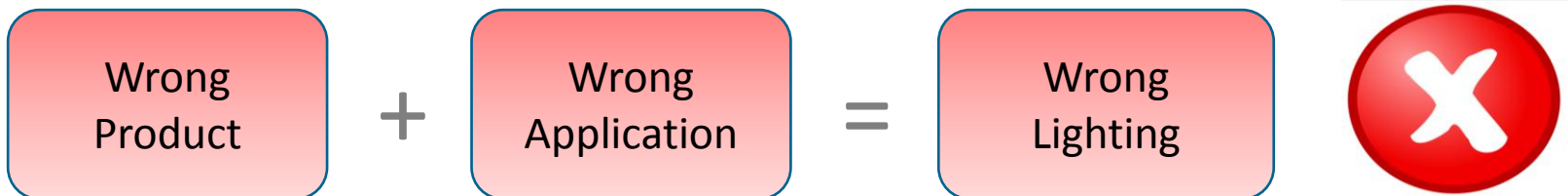
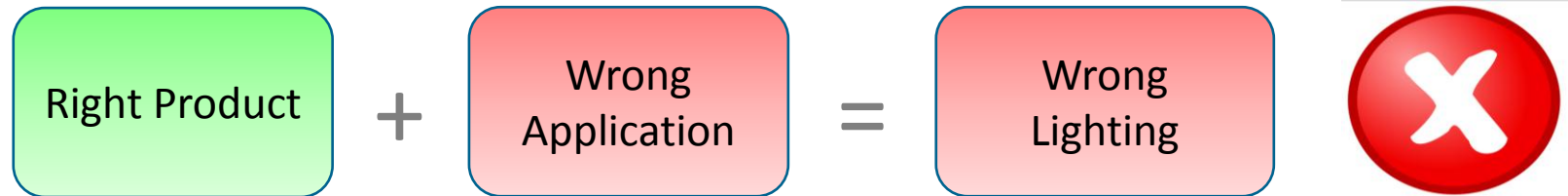
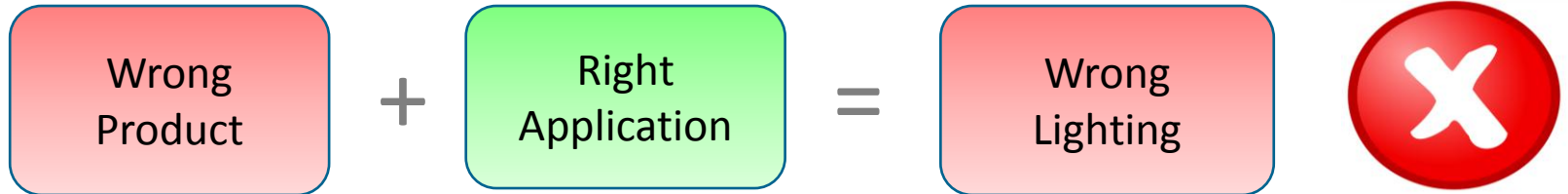


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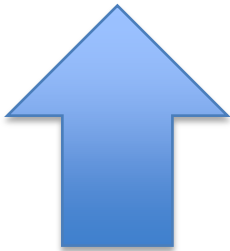
Challenges cities face



The right light



Connected operations

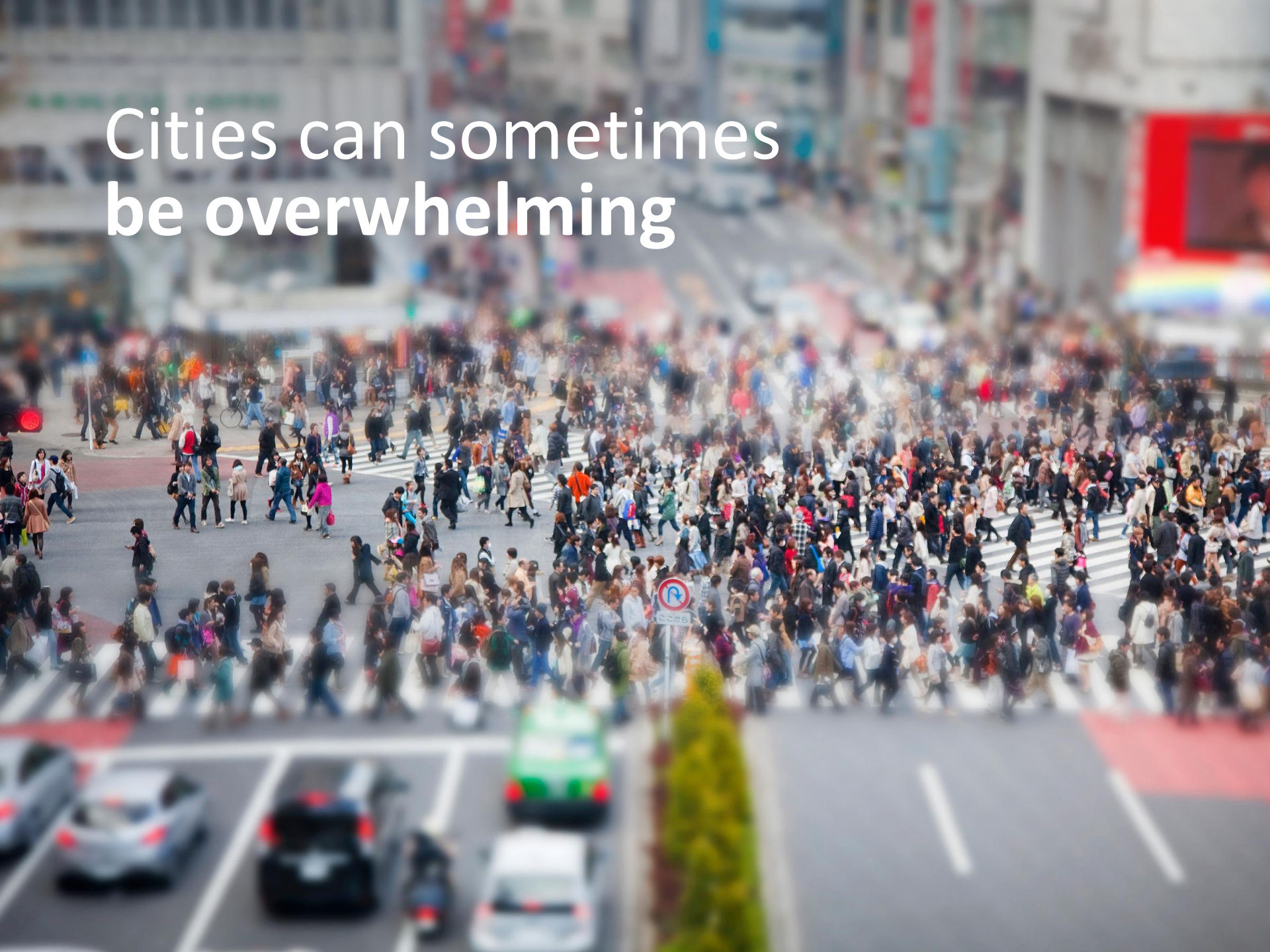


Cities face challenges

Systems are catalyzing change



Cities can sometimes
be overwhelming

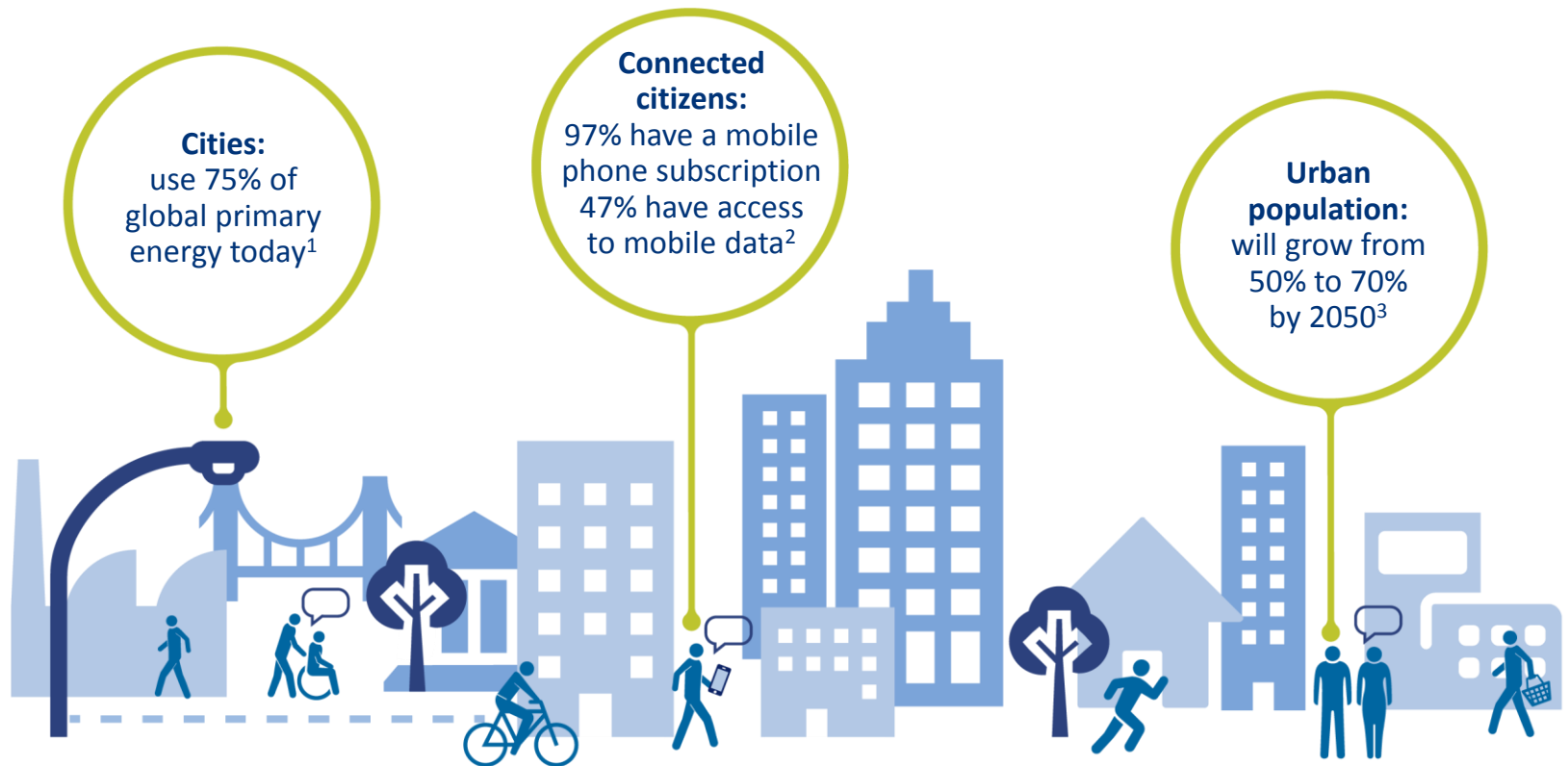


And yet their density
and diversity make
them attractive



Cities are on the rise

many dimensions to urbanization



¹UN Habitat

²World Bank and ITU, World Telecommunication/ICT Development Report and Database, 2015

³United Nations – Department of Economic and Social Affairs, 'World Urbanization Prospects', 2014



Are smart cities the way to go?

We partnered with EIU to ask citizens

This study by The Economist Intelligence Unit (EIU), supported by Philips Lighting, investigates how citizens and businesses in 12 diverse cities around the world envision the benefits of smart cities.

The choices of the respondents to the survey reflect the diverse nature of the challenges and opportunities facing different cities, from older cities, where technology is at work with infrastructure that may be centuries old, to new cities in emerging markets.

Full report available online >

The
Economist

Intelligence
Unit

PHILIPS

A global survey

12 cities*, 600 businesses, 2000 citizens and interviews with leading experts



*Barcelona, Berlin, Buenos Aires, Chicago, London, Los Angeles, Mexico City, New York City, Rio de Janeiro, Shanghai, Singapore & Toronto

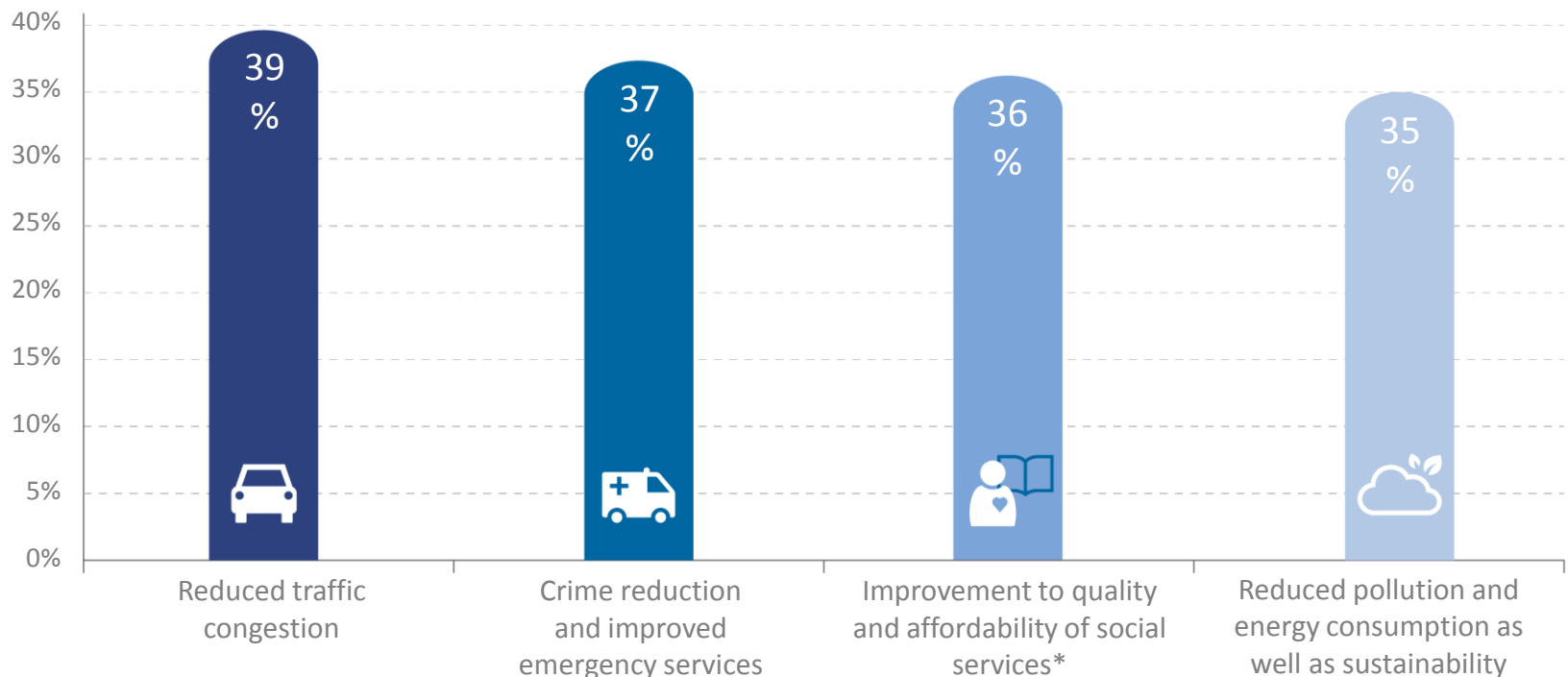
Full report available online

<http://empoweringcities.eiu.com>

Result #1: the fixable city

Near real-time feedback on urban services is possible

Citizens are willing to share personal data for improved city services, e.g. **35%** for less energy consumption.



Source: The Economist Intelligence Unit, 2016

*Such as Healthcare and Education

Result #2: the crowd sourced city

Growing interest of citizens in shaping their cities and more pressure on city governments to fulfill these needs



Citizens like to feedback

32% of citizens are currently providing feedback to their local authorities but **over one-half** say they would like to do so



Citizens like digital tools

51% want wider access to digital platforms to enable them to communicate with government



Cities have been quite slow to step into dialogue processes with citizens [on smart cities]

Jarmo Eskelinen, Chief Innovation and Technology Officer, Future Cities Catapult

Result #3: the collaborative city

The private sector is partner for advancing smart cities



Smart cities attract new talent

53% of businesses believe smart cities can help to attract top talent, which they believe can impact the bottom line



Businesses benefit from community engagement

A majority of executives (73%) are enthusiastic about the idea of facilitating citizen engagement in urban planning and design by sponsoring hackathons, appathons, online crowdsourcing challenges or similar digital innovation events



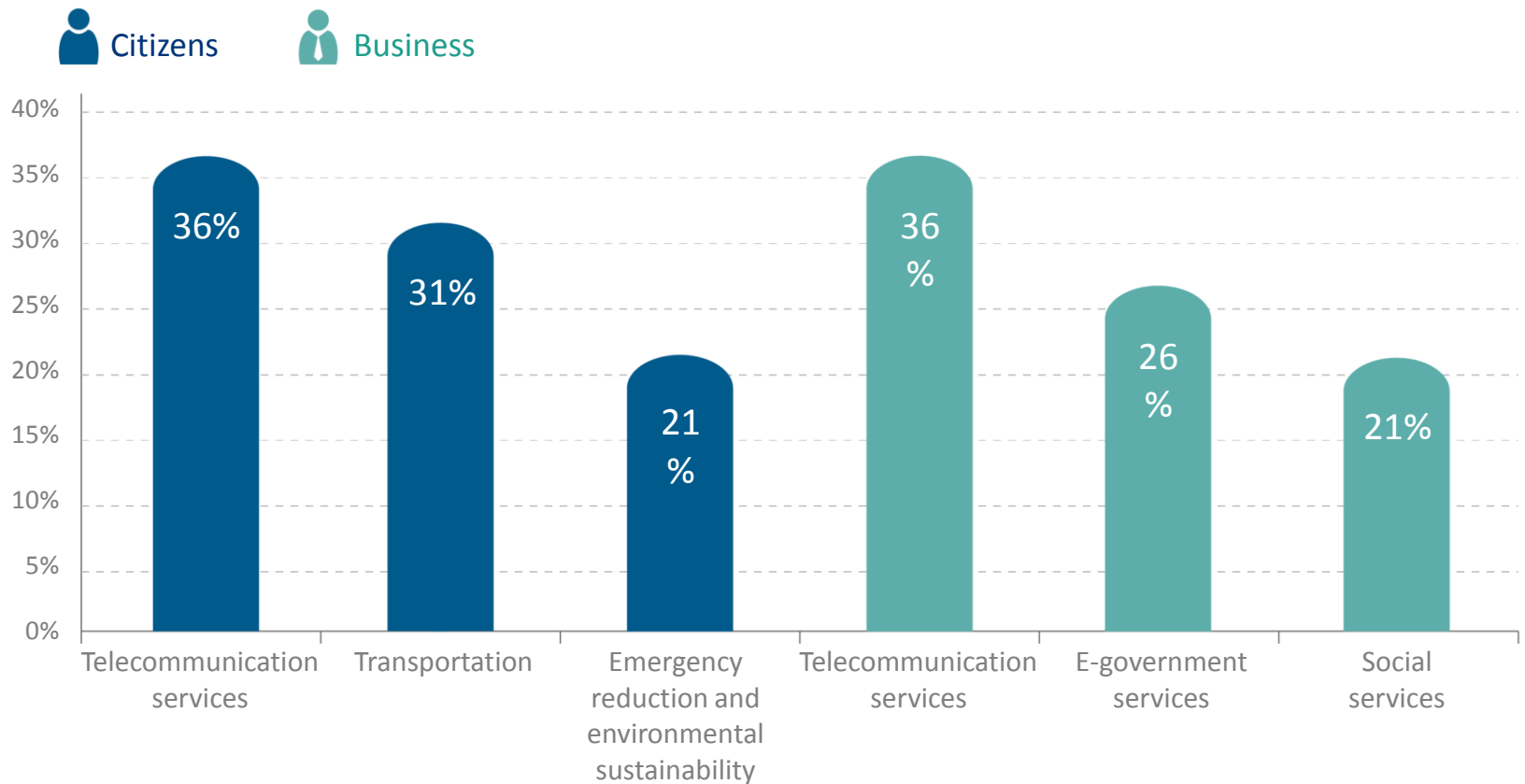
Buying existing technology from the shelf isn't that interesting. But putting a challenge on the table and inviting the private sector to help us solve it – that makes it interesting"

Ingrid van Engelshoven, Deputy Mayor, Knowledge Economy, International Affairs, Youth and Education, The Hague

Result #4: the connected city

Digital technology is a catalyst for urban transformation

How have/will digital technologies impact your city?



Civic leaders see the cloud as an enabler



50%

expect to gain some cost advantages with cloud



39%

expect it to change interaction with constituents

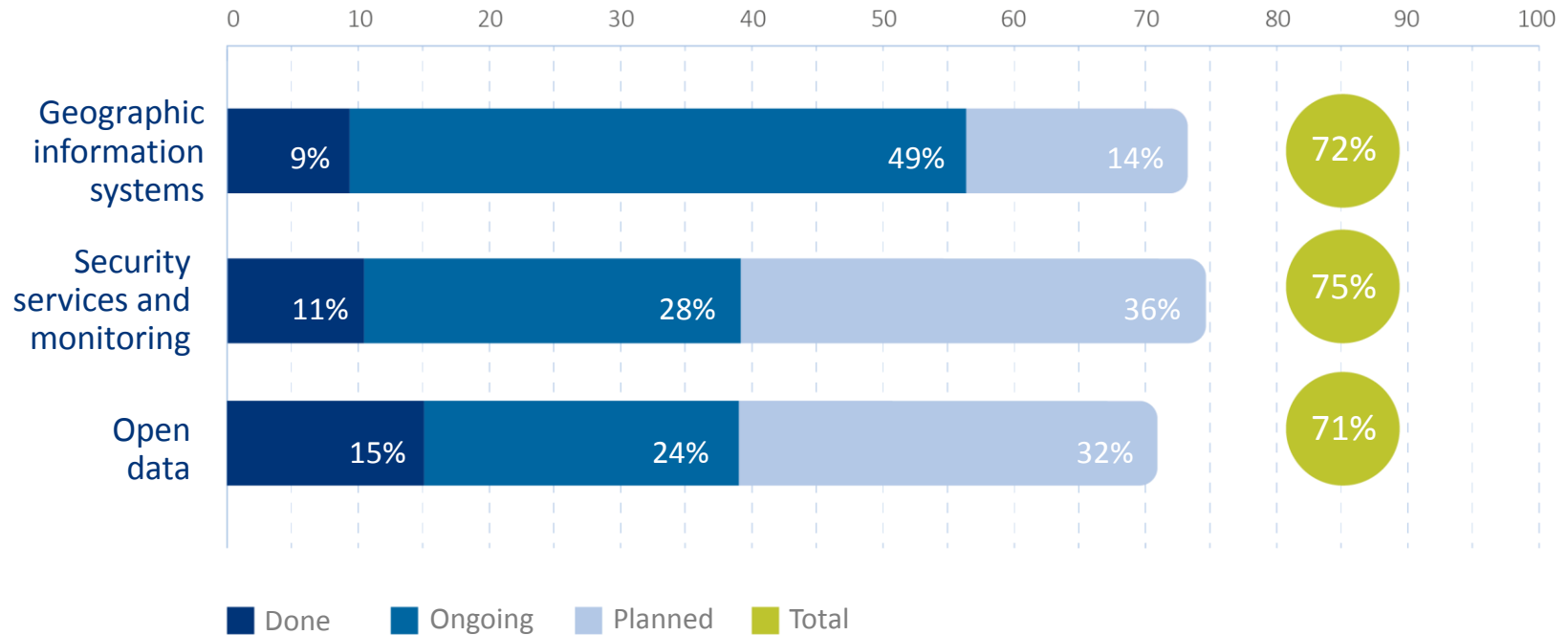


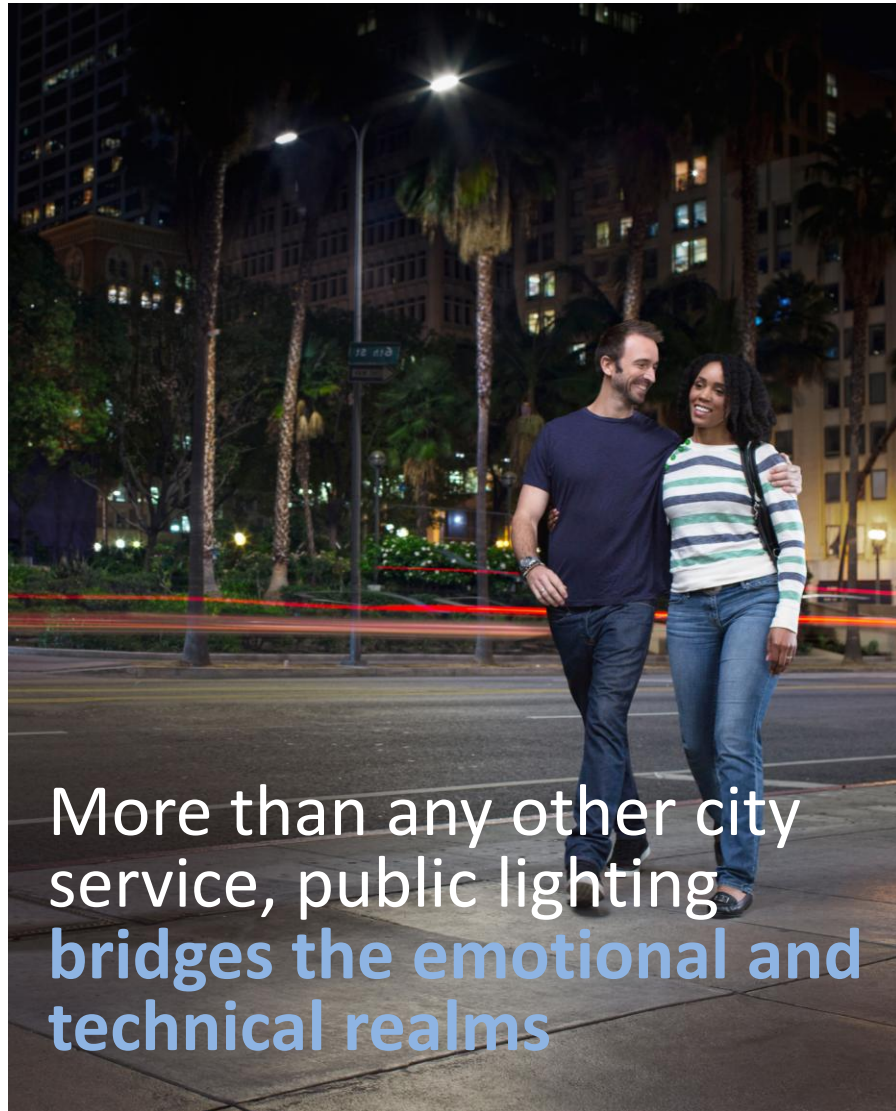
28%

expect it to fundamentally change their model for operations

Key government services are moving to the cloud

Rate of conversion to the cloud





More than any other city
service, public lighting
bridges the emotional and
technical realms



Public infrastructure
should be
as connected as we are

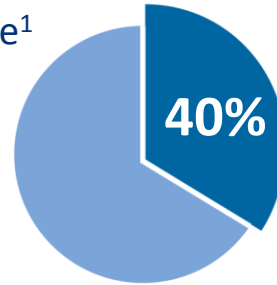
Public lighting is everywhere but connectivity is not



~300

million street lights worldwide¹

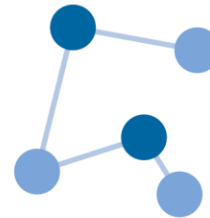
Meralco-based light poles:
> 20,000 light points in QC
> 10,000 light points in Manila
< 10,000 light points in Pasig



Lighting can account for up to 40% of a city's total energy consumption²



On average, public lighting is more than 20 years old³



2% of installed systems are connected, expected to reach 35% by 2025³

¹Northeast Group, *Global LED and Smart Street Lighting Forecast 2015-2025*

²European PPP Expertise Centre (EPEC), European Commission, *Energy Efficient Street Lighting*, 2013

³Philips market analysis

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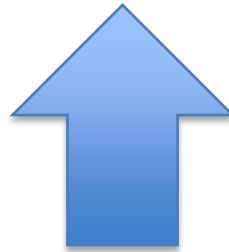
Challenges cities face



The right light



Connected operations



The right light

Ambient, dynamic,
responsive and interactive



Experience significant energy savings by upgrading to LED technology

50-70%

Energy savings with LED

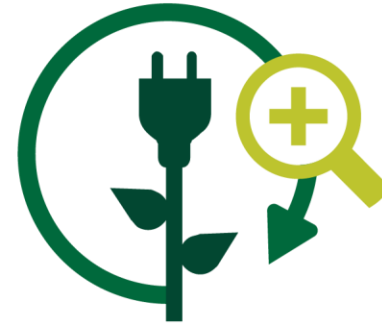


Realize climate goals


Global LED adoption would reduce lighting electricity consumption by more than 52% and cut global CO₂ emissions by 2.3% which is equivalent to:



**The combined annual
emissions of Texas
and Iowa**




**The combined annual
emissions of the UK
and Spain**



High-quality
LEDs provide
excellent color
rendering

Ambient light provides
visual comfort and **creates
the atmosphere of a space**



Delivering the
right light with
excellent
optics, flexible
controls, and
tunable
luminaires

Ambient light **empowers places**


Bridge, Little Rock, Arkansas
Photo credit: Paul Barrow and Rick Friedman



Lighting
dimmed in
industrial
area

100% light
output for
footpaths
through the
city park


Dynamic scheduling
provides the right light



White light
everyday, color-
changing effects
for special
occasions

Dynamic light
contributes to the
identity of cities

Responsive light is connected to **city rhythms**



Lighting
sculpture
responds to
environmental
data

The Bay Lights, San Francisco, California, USA
Artist: Leo Villareal
Photo credit: James Ewing

Despite progress, some continue to live in darkness.

The right light simply means receiving the gift of light.

“In the age of smart phone and driverless cars there are still **1.2 billion people that do not have access to electrical light. ... primitive light sources claim 1.5 mil people every year - the same number killed annually by HIV-related diseases.**

Solar-powered LED lighting can transform rural communities ... it does not have to be invented – it already exists and is proven. I call on politicians to stand together and commit to ending light poverty by 2030.”

Eric Rondolat, CEO, Philips Lighting



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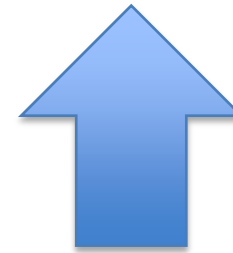
Challenges cities face



The right light



Connected operations



Connected operations

Deeper insight for public sector managers



Convergence of lighting and information technologies **creates new capabilities**

Leo Villareal, Bay Lights, San Francisco
Photo credits: Lucas Saugen

Benefits of Connected Lighting (Philips CityTouch)



Manage



Monitor



Measure



Maintain

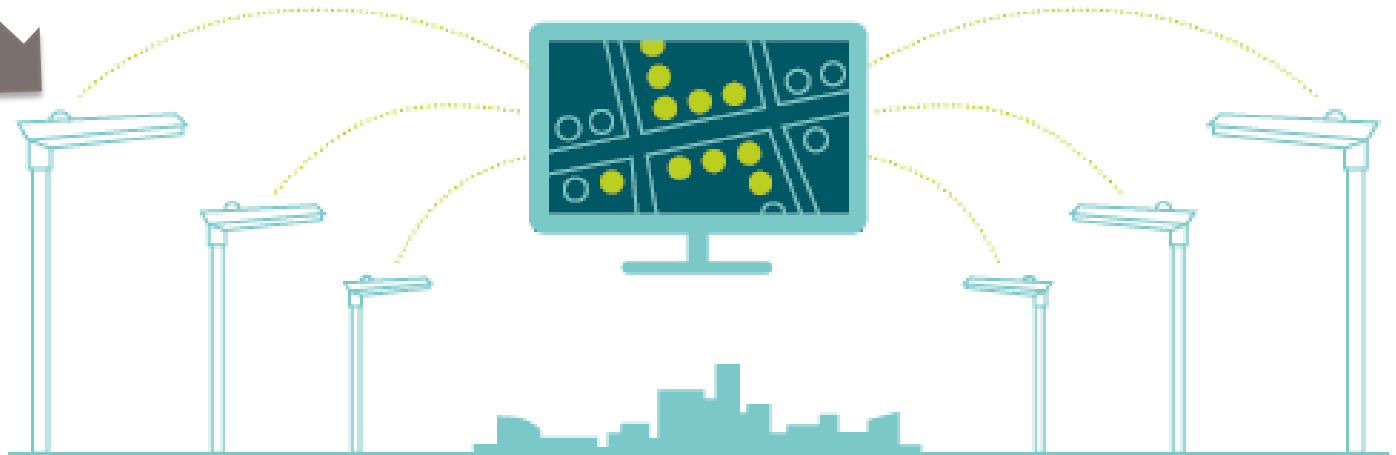


Plan



Get Insights

The Basic Workflow of Philips CityTouch



Automatic commissioning

Luminaires automatically connect to CityTouch system once installed



Automatic location

Luminaires are auto-located on the map with all asset data in place



Automatic data upload

All luminaire data automatically updates to your system

A photograph of two women, one older and one younger, smiling and looking at each other. They are in a modern interior space with large, glowing, cloud-like light fixtures in the background. The text is overlaid on the lower half of the image.

Keep the lights on for citizens,
**anticipate outages with
fault detection alerts**



Field technicians can
access information
anytime, anywhere

Operators control light levels remotely

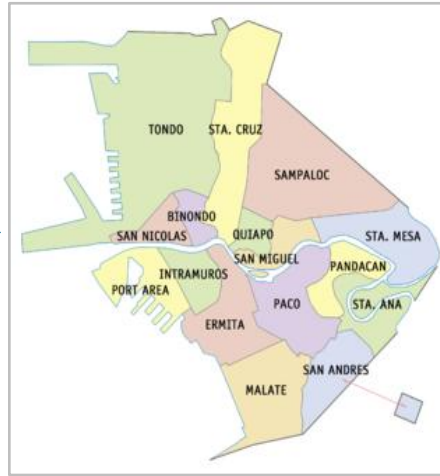


Map-based management with Philips City Touch

By CITY



By DISTRICT



By BARANGAY

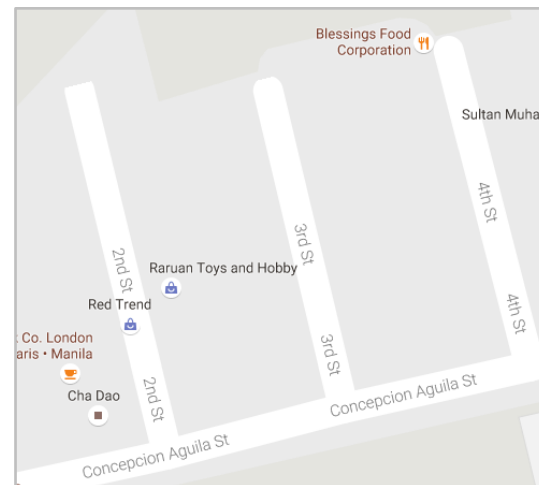


By LIGHTING POLE



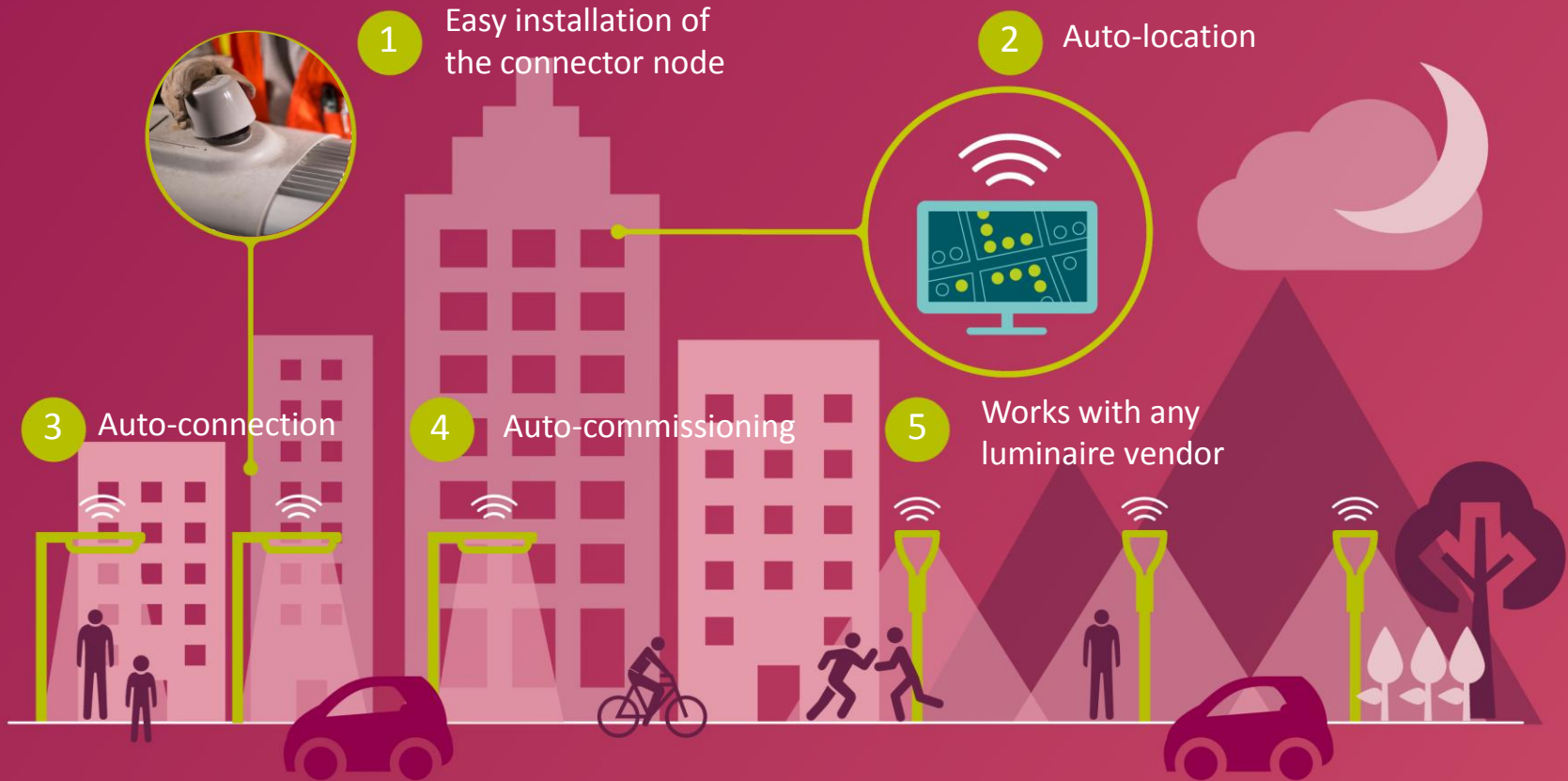
- Date installed
- Location
- Wattage
- Energy consumed
- Problem
- Service history (list of repairs and replacements)

By STREET



Philips CityTouch

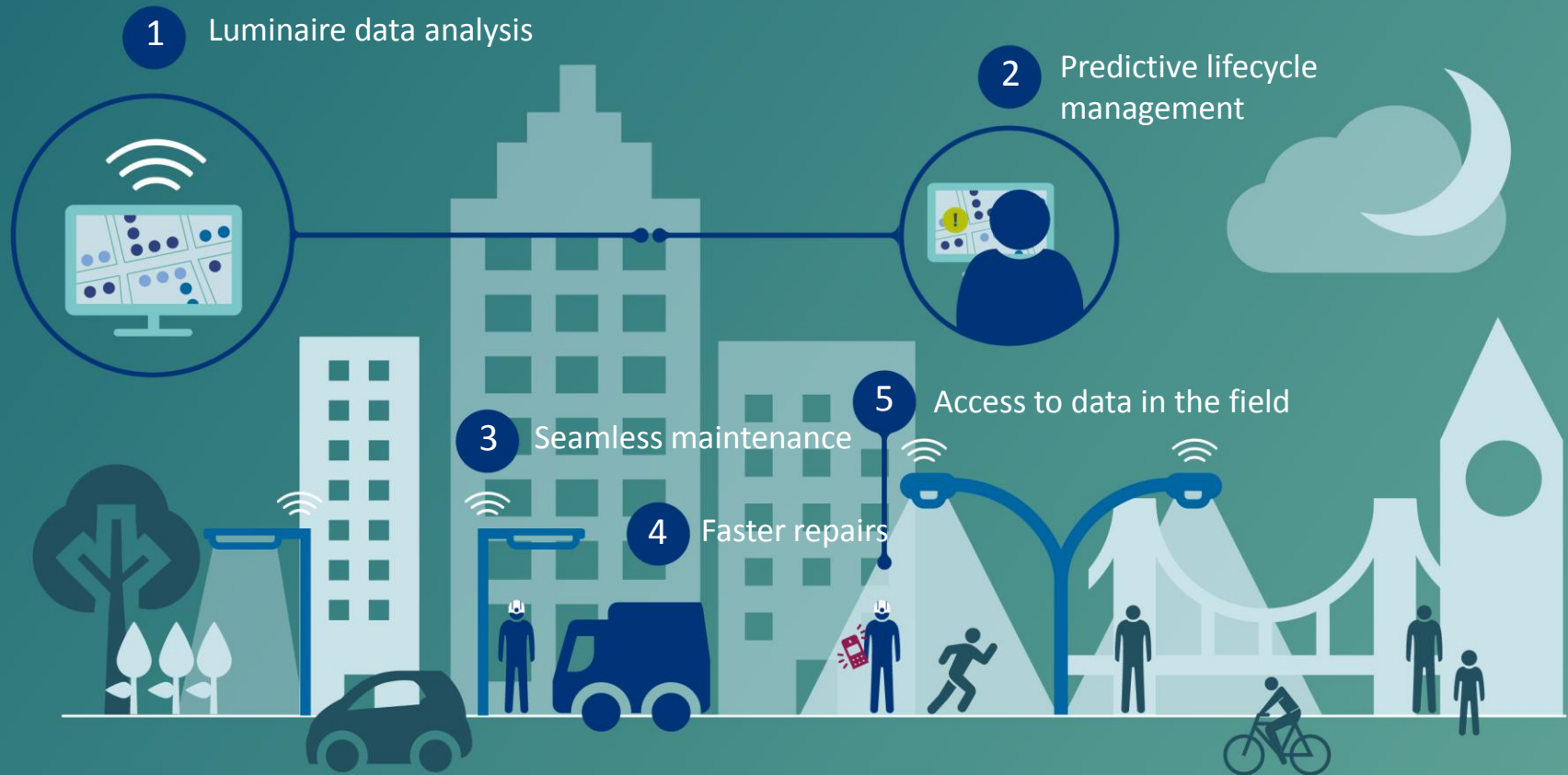
... means “plug-and-play”





Philips CityTouch

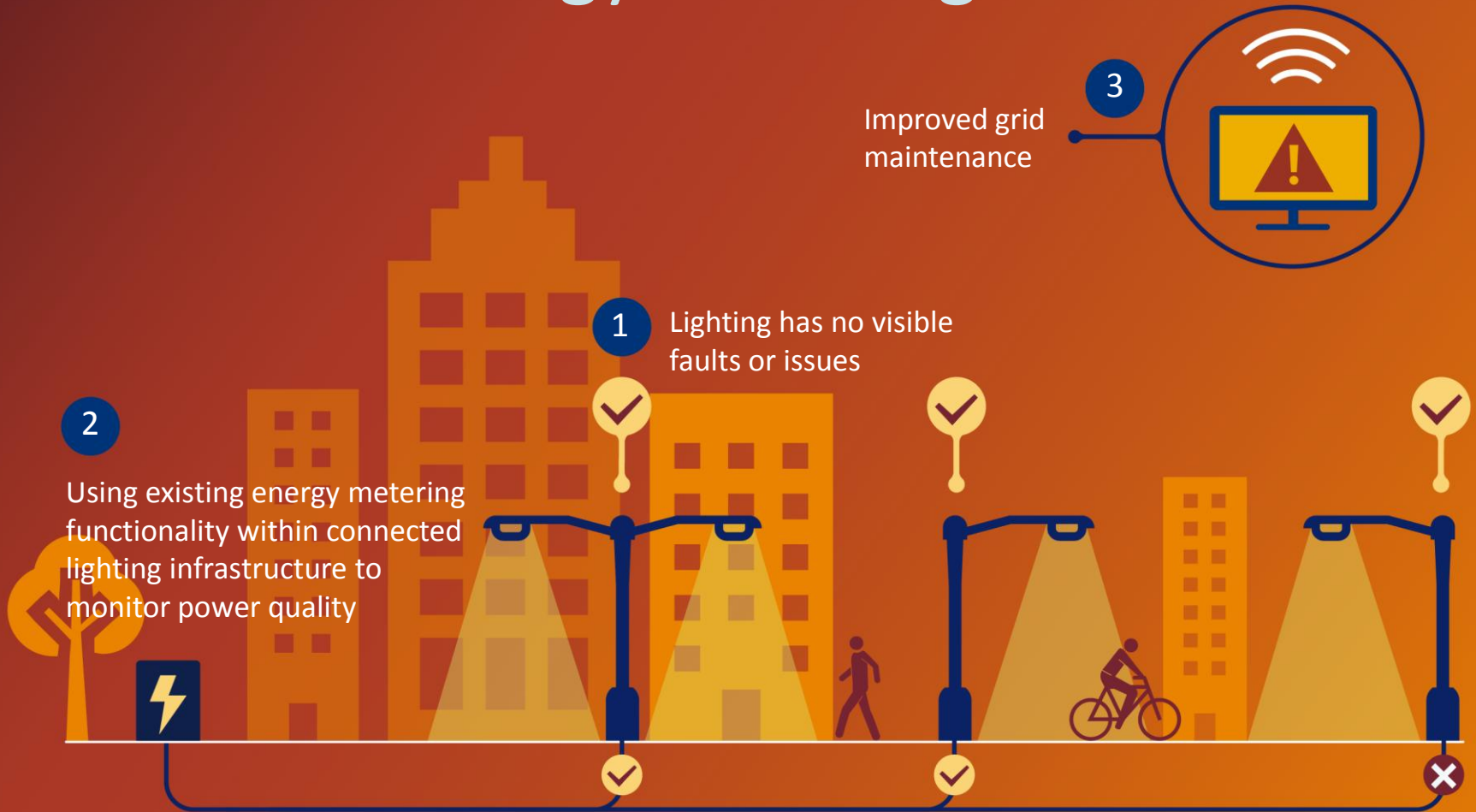
... means effective asset management





Philips CityTouch

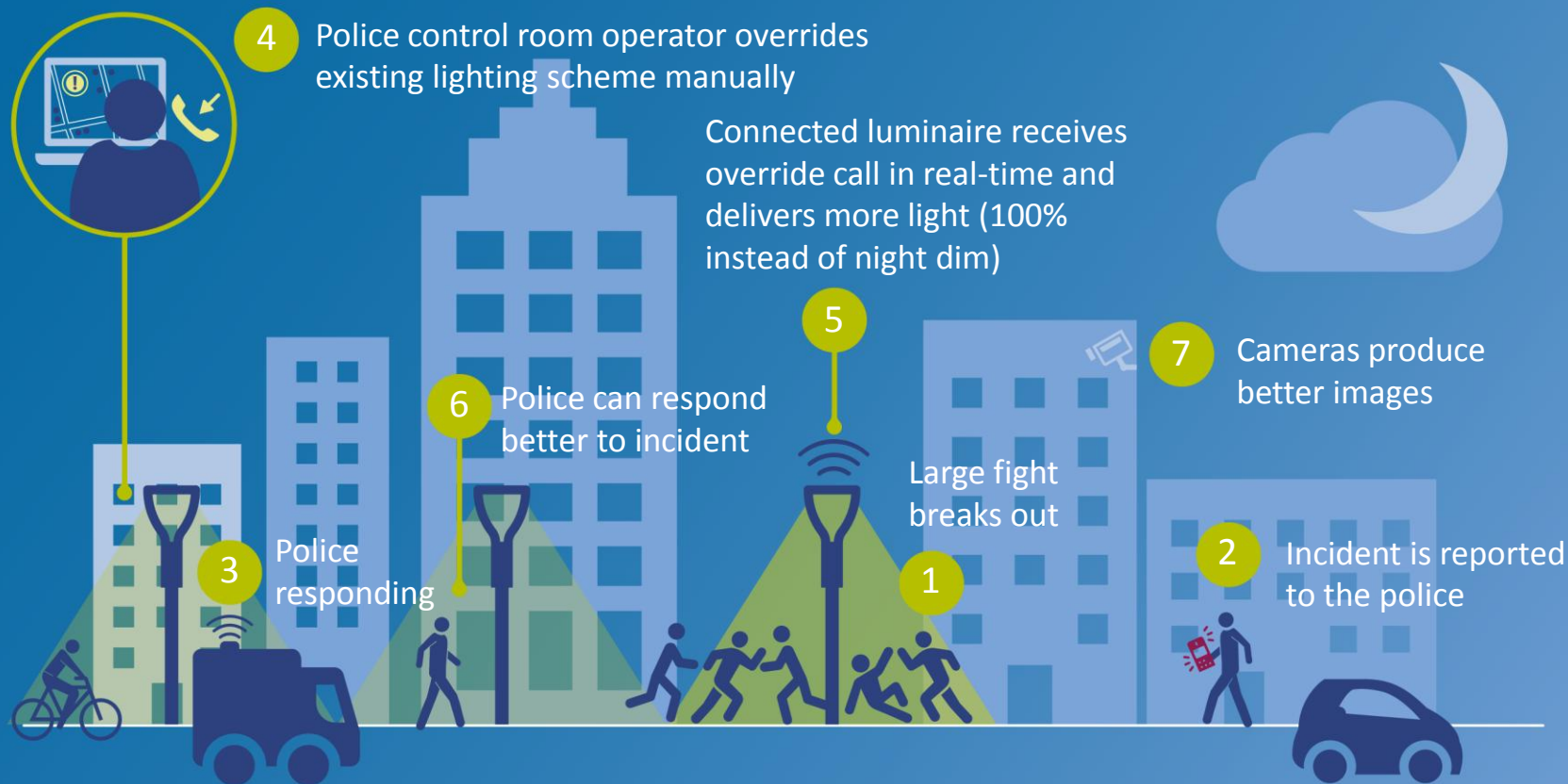
... means energy metering & health checks





Philips CityTouch

... helps CCTV pick-up & police mobilization





Philips CityTouch

... can detect sound anomalies



Return on investment within sight

Buenos Aires is replacing 91,000 streetlights with LED technology to reduce the city's energy consumption by more than 50%. In addition to energy savings, the city is already benefitting from operational efficiencies:



Lower maintenance costs:

New LED luminaires last up to 5x longer than conventional lighting



Higher response rates:

90% in 2016, compared to 1% in 2009



Effective energy usage:

Dimming street lights balances the electrical grid and delivers 15% additional energy savings

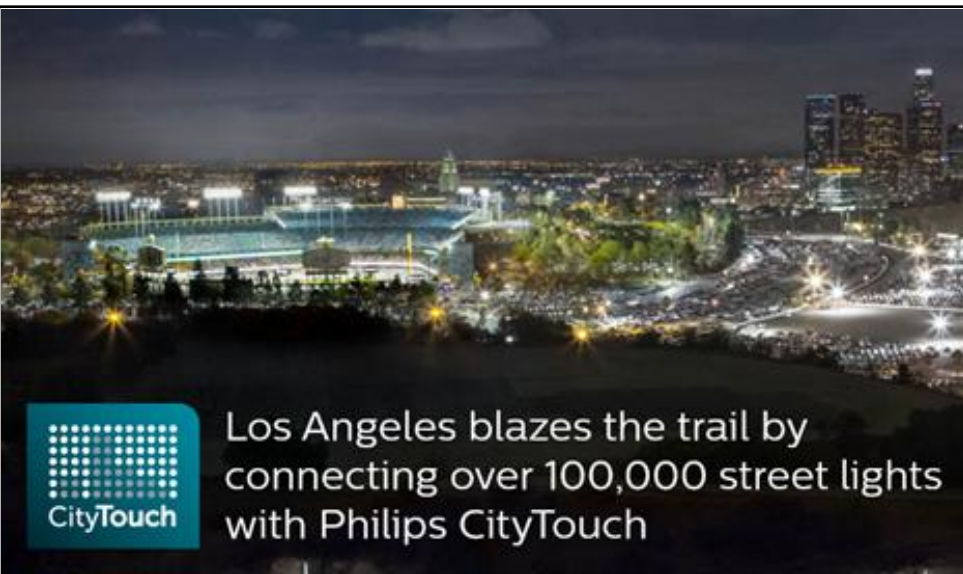
Philips CityTouch: brings Philippine cities on par with leading cities in the world

Madrid upgrades city infrastructure with Philips lighting in the largest street lighting project in the world

- The government of the city of Madrid will convert 100% of its street lighting to Philips energy-efficient lighting
- Philips lighting technology will enable energy savings of 44%
- The replacement will enable a safer, more sustainable and energy-efficient city

Philips renews the street lighting system of Buenos Aires with LED technology

- Philips will convert more than 70% of the street lights in the city of Buenos Aires to LED technology.
- Philips' LED-based lighting will enable electricity savings of over 50% for the city
- The replacement process has already started: new LED lighting from Philips will enable a safer, more sustainable and energy-efficient city.



Los Angeles blazes the trail by connecting over 100,000 street lights with Philips CityTouch

Philips Lighting implements one of the world's largest connected street lighting systems in Jakarta

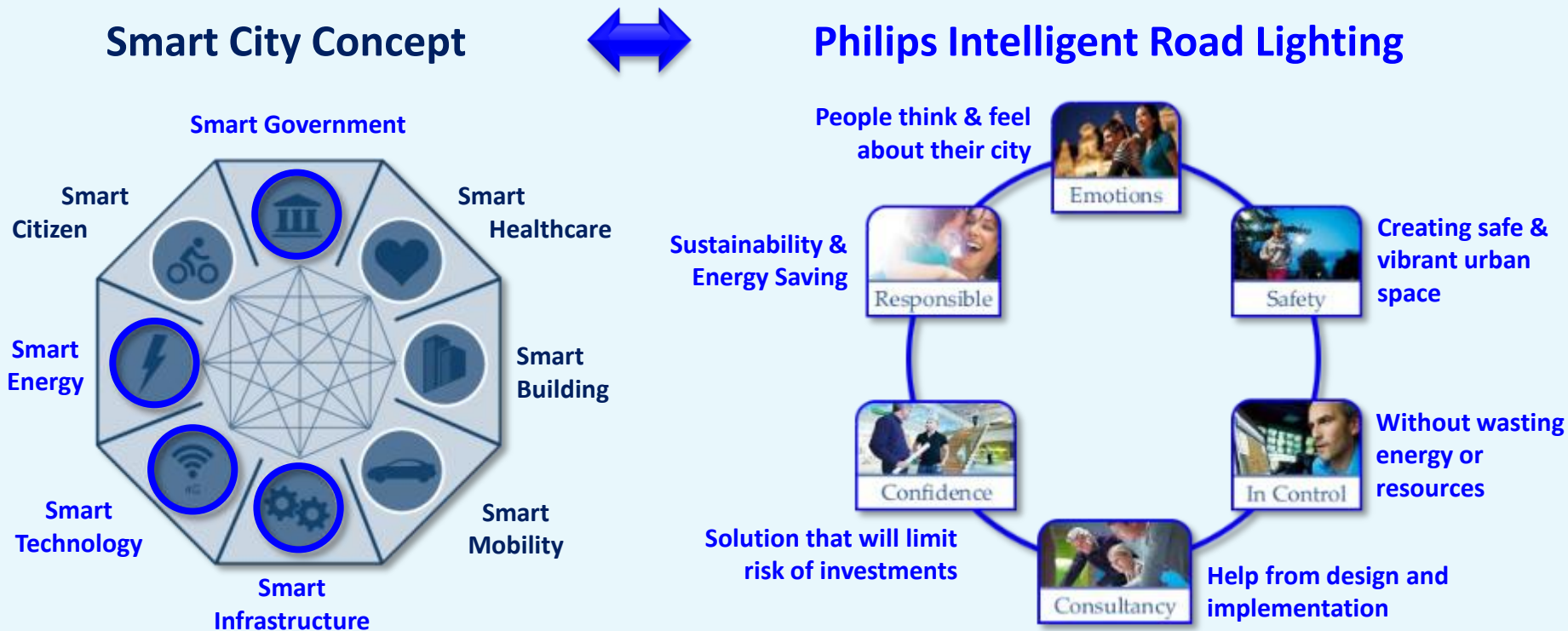
The speedy city-wide installation of nearly 90,000 connected street lights is a huge step towards Jakarta becoming a smart city

90,000 light poles to be installed in 7 months (430 light poles connected daily)



How Philips CityTouch can help cities in the Philippines?

Imagine if people could feel **safe** going around your cities at night without having to worry about going through dark/not well lit areas, **because** the local government is **in control**, knows exactly the road lighting conditions across the city in real time, and **responds** quickly to the problems with regards to lighting even before they receive complaints from its residents.



Our unique approach to business customer engagement

Developing solutions together

Understanding
the customer
challenge



Understanding the nature of the customer's challenge. Capturing and understanding business, technical, and other drivers.

Validating
requirements



Validating the business and technical requirements and discussion of potential solutions.

Tailored solution



Presentation of recommended solution tailored to customer's technical, business, and financial needs, with rigorous KPIs.

Co-creation vs
co-development
of solutions



Mutual ownership of the system and services with co-development of the optimal solution.

Implement and
manage



Project management team oversees thorough and effective deployment and management.

Supporting your business needs with **services**

Philips is a trusted partner to give you peace of mind



Professional services

Lighting system auditing, consulting, design, planning, and implementation

Lifecycle services

Ensures long-lasting, hassle-free, and cost-effective lighting system performance

Managed services

Plan, manage, and finance any upgrade to your lighting system



Let us together make a difference
for a . . .

Safe

Peaceful

Orderly and

Efficient Philippines

For more information contact:

(Andrew Yan / Jagan Srinivasan)

(+63-9178876000 / +63-9175134123)

(andrew.c.yan@philips.com / Jagannathan.s@philips.com)

