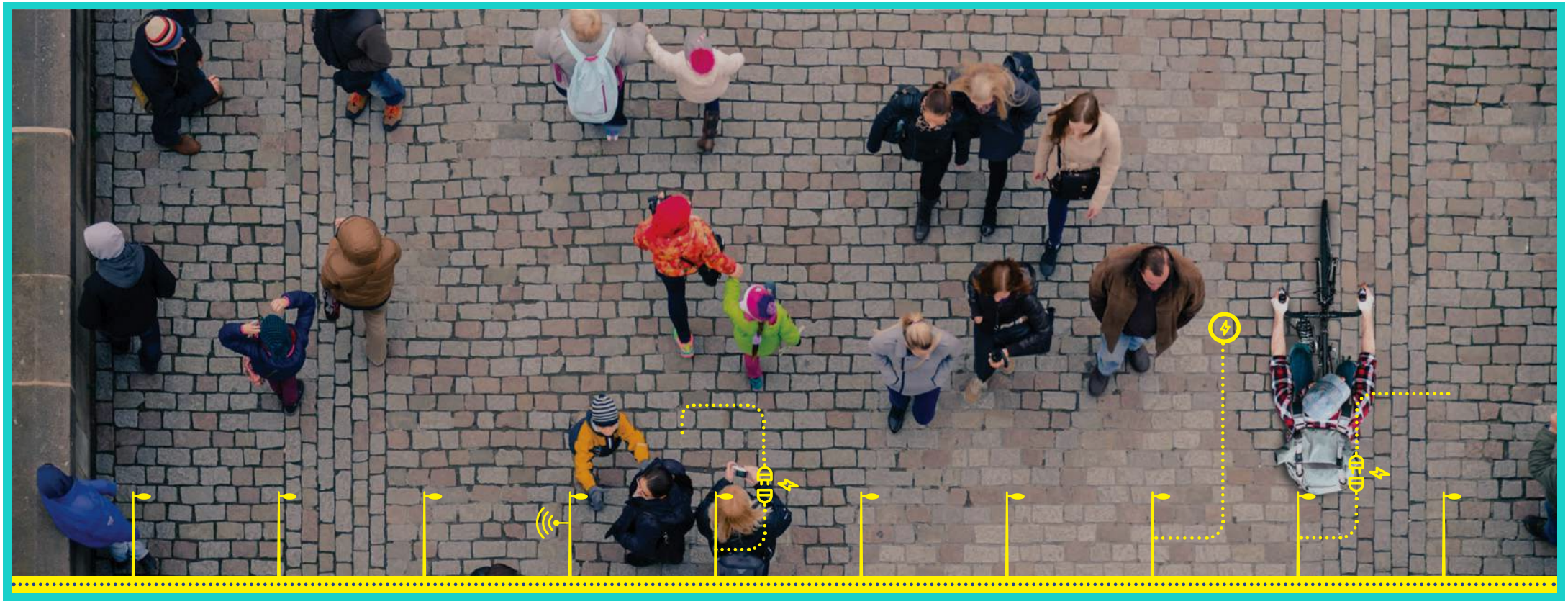
Tegis®



DEMAND MORE THAN JUST LIGHT FROM YOUR STREET LIGHTING

LACROIX

YOUR SMART TERRITORY
THANKS TO IMPROVED STREET LIGHTING

Dynamic lighting (detection, depending on traffic density), **variable-message signs, festive illuminations, PA systems, market plots, water distribution stations, CCTV cameras...**

... are services for citizens and sources of security and functionality for businesses (city centre appeal, quality of service, information) to live the city on a daily basis.

Today, each of these services can be connected to the lighting network or operate from their own dedicated power grid.
In this context, how can we offer new services to citizens and encourage new uses?

That's the whole point of the smart city, built on an improved street lighting network.

In order to connect third-party services to the street lighting network and offer a range of services that are adapted to new urban uses, a **24-hour permanent power supply is essential**. This power supply will be sourced from the street lighting network in your community.

Tomorrow, citizen will be able to access the Internet by connecting to their city's WiFi, or recharge their electric bikes by connecting to a lamp post, as well as benefitting from many other uses that are yet to be imagined.

Sofia can recharge her electric bike via her city's lighting network, and then leave to meet her friend.

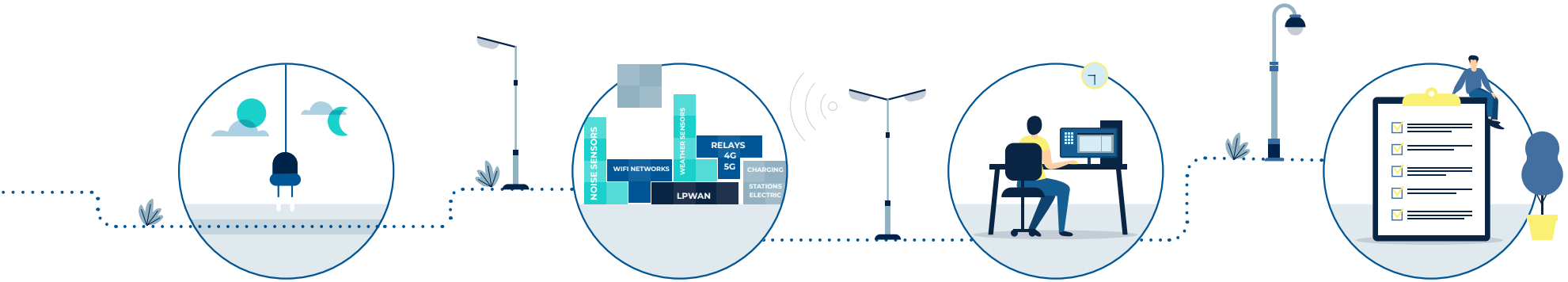
Morgane can walk down the street confidently – the CCTV camera in her neighbourhood is connected to her city's lighting network 24 hours a day, and Nestor benefits too.

At the market, Adam can use his city's lighting system to make his candy floss, to the delight of all the locals with a sweet tooth.

Thanks to their city's lighting network, Jack and Julia can surf the web on their WiFi-connected mobiles and check the showing times of the next film being screened at the cinema.

TEGIS LIGHTING PLUS 24/7

INTELLIGENT STREET LIGHTING MANAGEMENT ECOSYSTEM FOR 24-HOUR OPERATION



Transform any street lighting network into a permanent supply grid for new services, in a simple manner and without any civil engineering:

- By integrating a Tegis control unit into the street lighting cabinet
- By integrating TNX24 nodes and the TRX associated relay into the candelabra masts

Sustain and adapt your infrastructure to the pace of your changing needs:

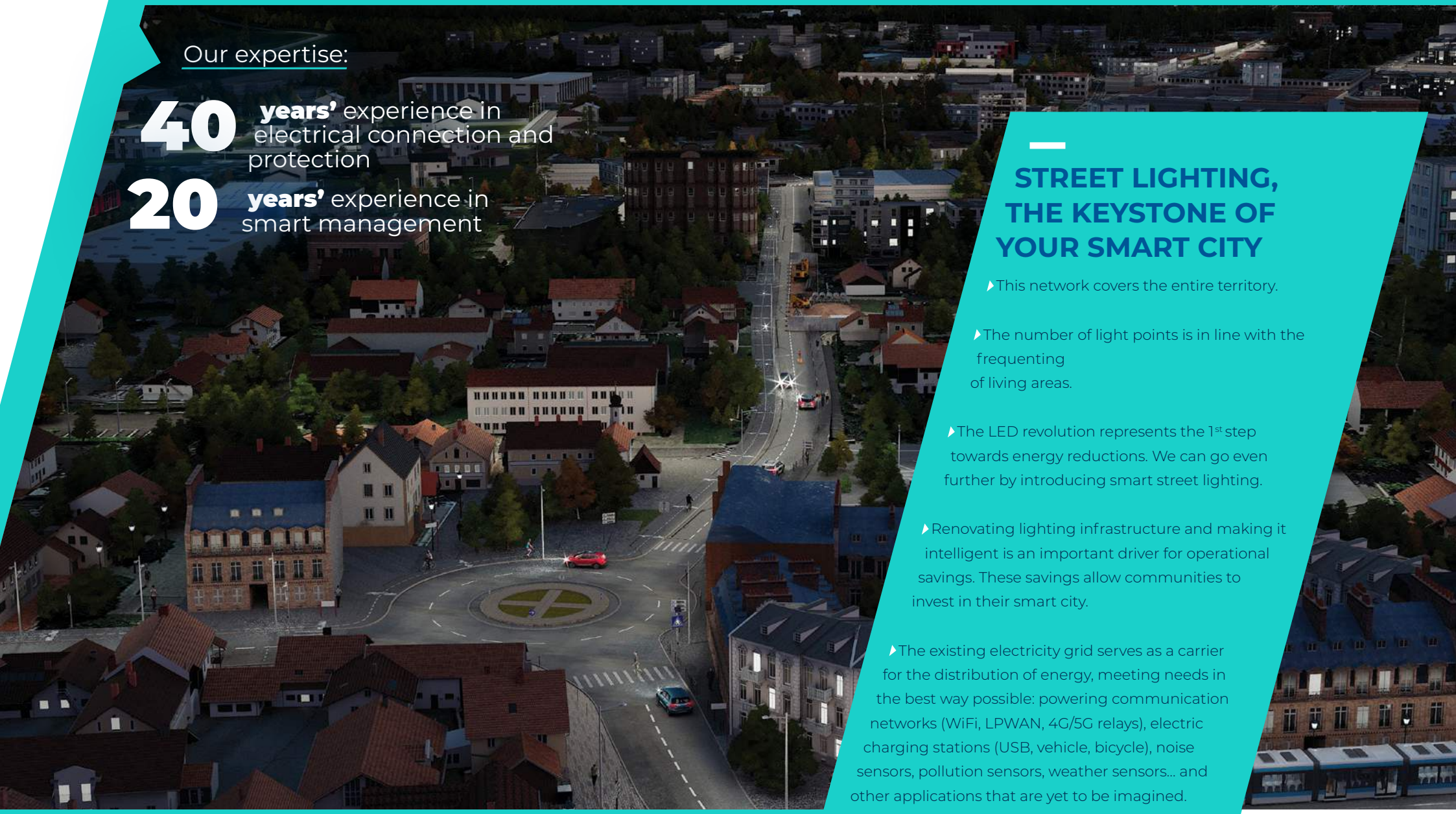
- Either all cabinets or only few of them operate 24/7
- Intelligent management of public lighting can easily evolve into 24-hour intelligent management of street lighting and associated third-party services

Control and monitor the cabinet, lighting points and third-party services, powered by the street lighting network:

- Remote configuration on the LX Connect interface
- Dimming control at light points – DALI
- Third-party services – dry contact
- Programming of groups of light points or third-party services independently of power cabinets
- Real-time monitoring of each light point and its associated third-party service
- Fault analysis

Collect and analyse the power consumption of the cabinet, light points and third-party services, powered by the street lighting network:

- Electrical measurements of light points and third-party services in snapshots, daily reporting of consumption indexes for light points and third-party services
- Energy counting
- Analysis of consumption distribution between light points and third-party services



Our expertise:

40 **years'** experience in electrical connection and protection

20 **years'** experience in smart management

STREET LIGHTING, THE KEYSTONE OF YOUR SMART CITY

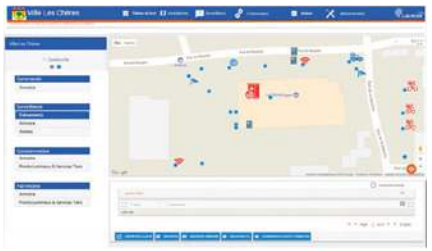
- This network covers the entire territory.
- The number of light points is in line with the frequenting of living areas.
- The LED revolution represents the 1st step towards energy reductions. We can go even further by introducing smart street lighting.
- Renovating lighting infrastructure and making it intelligent is an important driver for operational savings. These savings allow communities to invest in their smart city.
- The existing electricity grid serves as a carrier for the distribution of energy, meeting needs in the best way possible: powering communication networks (WiFi, LPWAN, 4G/5G relays), electric charging stations (USB, vehicle, bicycle), noise sensors, pollution sensors, weather sensors... and other applications that are yet to be imagined.

LX CONNECT

AN INTUITIVE, ERGONOMIC AND SECURE PLATFORM

- The LX Connect platform is easy to navigate, giving access to the control configuration, monitoring, consumption reporting and installation analysis, from the cabinet to the light points and associated third-party services
- The LX Connect is scalable with a web interface that gives automatic access to the latest features
- A secure environment

CONTROL AND MONITORING OF THIRD-PARTY SERVICES

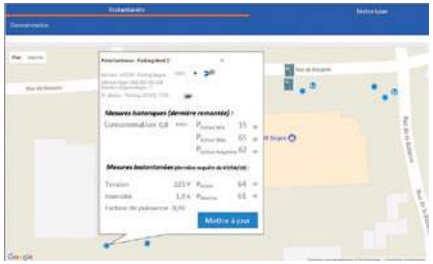


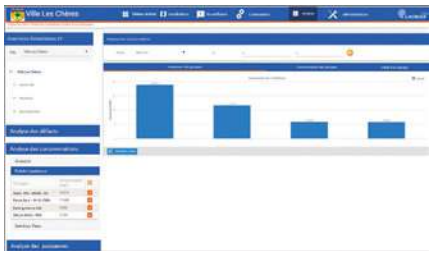
CABINET CONTROL PROCESS

INSTANT CONSUMPTION

for a light point or third-party service

AND DISTRIBUTION OF CONSUMPTION

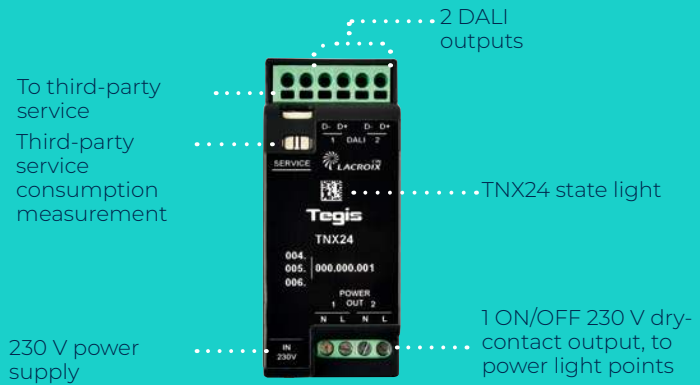




CONSUMPTION ANALYSIS

of groups of light points and third-party services

TNX24, A COMMUNICATING NODE
AND THE ASSOCIATED TRX RELAY NODE



- Every node is a transmitter, receiver and repeater
- 2 DALI outputs, up to 4 lighting fixtures per DALI output*
- 1 consumption measuring device on all light points + 1 dedicated measuring device for third-party services
- **3 unique addresses by TNX24:**
  - 2 for light points
  - 1 for third-party service
- Up to 150 unique addresses per control unit
- **Distance between 2 nodes:** 150 m
- **Breaking power:** 2 A – 230 V
- **Dimensions in mm (W × H × D):** 36 × 85 × 43 – 2 modules/ DIN Rail
- **Energy measurement class (active power):** Class 0,5 for light points Class 1 for third-party services
- **Standby power consumption:** 0.55 W
- **Operating temperature:** -25 to +55°C
- **Operating voltage:** 230 VAc
- **Certification:** CE

- **Breaking power:** 6 A – 230 V
- **Dimensions in mm (W × H × D):** 18 × 85 × 43 – 1 module/DIN Rail
- **Operating temperature:** -25 to +55°C
- **Operating voltage:** 230 VAc
- **Certification:** CE

Control unit and PLC module

* Refer to TNX24 datasheet for max. Inrush current.

COMPACT 24-HOUR CONFIGURATION, AVAILABLE FOR 4 M MASTS THANKS TO THE CITYPAK, THE JUNCTION BOX THAT IS ENTIRELY DEDICATED TO INTELLIGENT STREET LIGHTING.

CONNECTED
TECHNOLOGIES
FOR **SMARTER**
WATER &
ENERGY

LACROIX

LACROIX - Environment Smart Lighting
1, rue de Maupas
69380 Les Chères . FRANCE
Tél : +33 (0)4 78 47 33 55
info.eclairage-public@lacroix.group

www.lacroix-environment.com

PRINT ENVIRONNEMENT

Paper from sustainably managed forests.