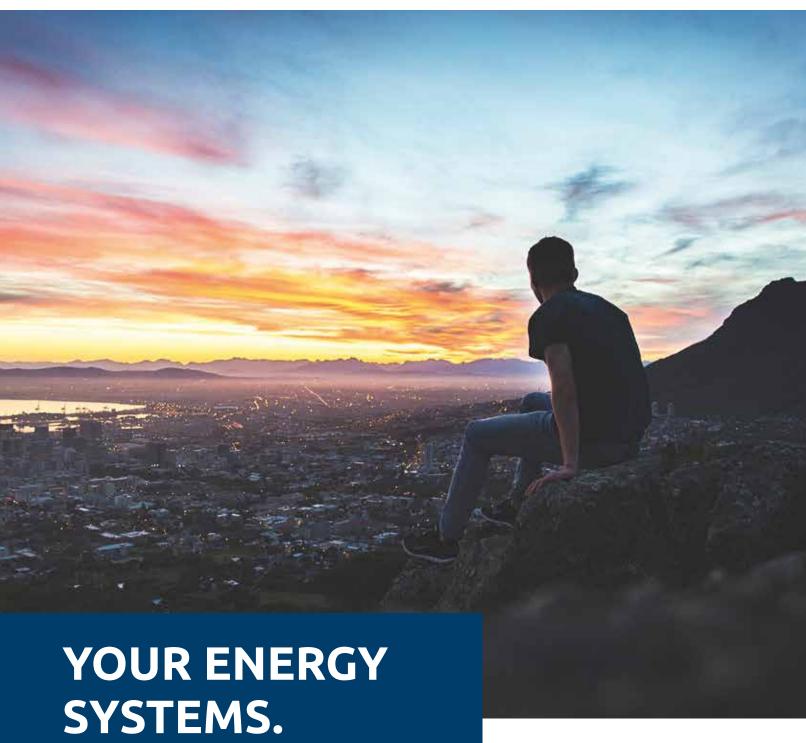




**VISION & SYNERGY** 



**OUR NETWORKS.** 

WWW.TELLOS.FR



TELLOS is an **independent**, **family-run** Group with over 40 years of experience in developing and managing **innovation-led**, **interconnected network infrastructures** for both local authorities and industry.

The Group operates both in **France and internationally** and has an ongoing focus on improving energy efficiency and in providing an ever-growing range of services for building the cities and towns of the future.



#### A BROAD-BASED APPROACH

Preparing today's projects within a **vision of the future** which encompasses the city in all its complexity, to help give the city's **services** (transport, waste management, building climate control, energy) a **smart new direction**.

#### A WIDE RANGE OF COMPETENCIES

TELLOS Group's local affiliates offer a network of **experts** working in each of our business lines.





#### **PRODUCTIVE SYNERGY**

TELLOS Group affiliates work with an interconnected system which allows them to address the new challenges thrown up every day. The Group's ability to run projects within different environments also offers many advantages and allows it to provide comprehensive and innovative solutions.

#### **BORDERLESS OPERATION**

TELLOS Group works closely with leading companies in the European and worldwide markets to provide global solutions for large-scale projects, such as nuclear power plants, water treatment and waste recycling.



#### YOUR AMBITION. OUR OPPORTUNITIES.

Jobs offered in the TELLOS Group reflect the role played by its affiliates: a finely-honed collection of different spheres of expertise working together to meet the challenges of tomorrow.

WWW.TELLOS.FR > CAREERS

## BUILDING WITH IMAGINATION.

Respecting our commitments and designing the city of the future for the benefit of its users.

Tomorrow's cities will be **smart and connected**, with innovation-led network infrastructures providing solutions for improving users' daily lives. The many benefits will include lower consumption and maintenance needs, the use of renewable energies and real-time traffic data capture.

The networks of the future are already within the grasp of modern technology. TELLOS Group has a long-term approach based on 3 main objectives – **improving the quality of urban life, reducing overall costs and making its solutions more efficient.** 



#### **INNOVATION / INTELLIGENCE**

KEEPING AHEAD THROUGH ONGOING INNOVATION AND BY ANTICIPATING THE FUTURE.

- Technology watch ongoing and methodical.
- **Tangible innovations** concrete solutions for the challenges facing the cities and industries of the future.

#### **ECONOMY / OPTIMISATION**

FORMULATING EFFECTIVE STRATEGIES AND BOLD FUNDING SOLUTIONS FOR WINNING TOGETHER.

- Extensive engineering study for each project, including existing infrastructures and upcoming projects.
- **New financing package** proposals: collaboration, identifying funders...
- Solutions tailored to **customer priorities** (budget, lead times, flow, safety...).

#### **SERVICES**

WORKING ALONGSIDE OUR CUSTOMERS AND LISTENING TO THEIR NEEDS TO CREATE A CLIMATE OF MUTUAL TRUST.

- Expert personalised support through a single contact person.
- Anticipation of future needs (maintenance, project extension...).

#### **PEOPLE**

PEOPLE ARE A CORE COMPONENT OF OUR CORPORATE PHILOSOPHY, AS WORKING TOGETHER MAKES US STRONGER TOGETHER.

- An emphatic commitment to social cohesion and employee satisfaction.
- Creating and providing in-house training for the professions of the future.
- Listening, mutual respect and commitments.

#### **ENVIRONMENT**

EMBRACING ENERGY TRANSITION TO DRIVE SUSTAINABLE DEVELOPMENT AND RESPECT FOR THE ENVIRONMENT.

- A focus on **renewable energies** to improve energy efficiency while reducing carbon footprint.
- Reducing project-related pollution.
- Paperless processes.

## TELLOS ENGINEERING.

A multi-specialist approach. Ongoing innovation.

TELLOS ENGINEERING is the **Group's in-house engineering office**. It acts as the interface with our customers, **organising the Group's expertise for each project** and providing **lasting, innovative solutions** along 3 main lines.

#### **TECHNICAL**

PROVIDING AN INNOVATION-LED APPROACH EMBRACING EFFICIENT TECHNICAL SOLUTIONS.

- Comprehensive solutions for the management and conceptualisation of complex urban areas, including housing estates, business and retail parks, industrial areas.
- **Ongoing technological watch** to find new solutions for improving performance, costs, management and connectivity of networks in their initial, development or maintenance stages.



OFFERING TURNKEY SOLUTIONS IN LINE WITH STATUTORY OBLIGATIONS WHICH MIGHT OTHERWISE HOLD BACK YOUR PROJECTS.

• Assistance in delivering legally compliant infrastructure projects, including construction, upkeep, maintenance and operation (Public service delegation contract) and marketing.



#### **FINANCIAL**

SECURING THE FINANCIAL SUSTAINABILITY OF TOWN AND CITY PROJECTS.

- Financial solutions, including the transfer of costs.
- Seeking subventions for innovation-led projects, such as virtuous and standard urban heating networks.

## NERGY

#### GAS NETWORKS AND DERIVATIVES

- Optimising existing networks
- Expanding gas infrastructures
- Gas energy transition

#### HEATING AND COOLING NETWORKS

- Assessing networks
- Network design and sizing
- Project management from the boiler room to the substation
- Feasibility, optimising energy investments

# SMART BUILDING & CIT

#### SMART LIGHTING AND ILLUMINATION

- Maintenance and operation
- Design of interconnected urban networks
- Innovation and R&D
- Energy-saving program

#### ELECTRICITY NETWORKS

- Maintenance and operation
- Design
- Innovation and R&D

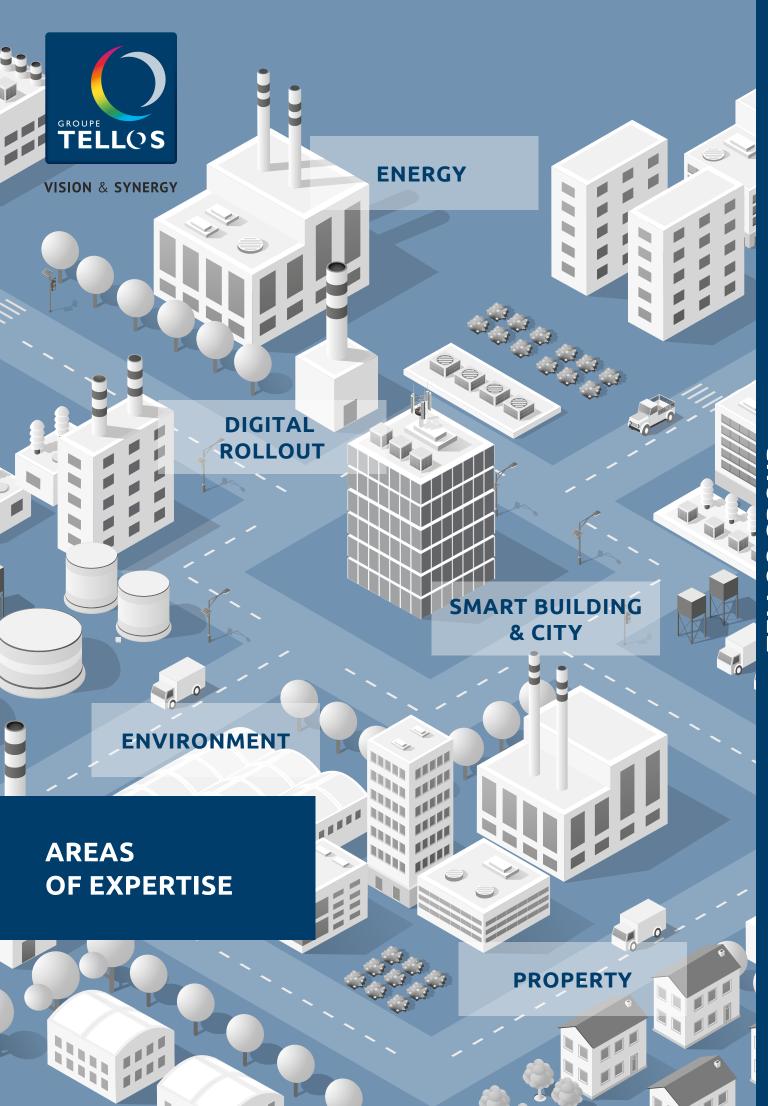
# DIGITAL

#### OPTICAL-FIBER NETWORKS

- Design and installation
- Very high speed
- Maintenance and operation

#### **RADIOCOMMUNICATION**

- Negotiating new sites
- Transmission and radio engineering



## **AREAS OF EXPERTISE**

NERG

## GAS NETWORKS AND DERIVATIVES

- Network extensions and renovation
- Gas systems for public and private services
- Cogeneration and renewable energies

## HEATING AND COOLING NETWORKS

- Smart networks
- Rehabilitation of old networks
- Cogeneration
- Boiler room and substation

## HVAC AND SANITARY ENGINEERING

- Ventilation
- Climate control
- Plumbing

SMART BUILDING & CITY

#### SMART LIGHTING AND ILLUMINATION

- Enhancing historical buildings
- Responsible and smart public lighting system
- Media façades
- Interactive lighting
- Illuminations for special occasions
- LiFi (Light Fidelity)

#### LECTRICITY NETWORKS

- · Electricity distribution and transport networks
- Charging stations
- Solar panels
- Access control and CCTV
- Traffic-flow management
- Remote system management

DIGITAL ROLLOUT

#### **OPTICAL-FIBER NETWORKS**

- Regional digital developer
- Agreements for using existing networks
- Installation of fiber in concerted development areas and housing estates
- Very high speed
- Operator of operators
- Optical-fiber cable leasing

#### **RADIOCOMMUNICATION**

- New sites
- Leasing of high points or an area on a TELLOS site
- Hosting antennae or facilities
- 4G rollout and 5G configuration

PROPERTY

#### LAND DEVELOPMENT

- Purchase and sale of land
- Site preparation, levelling and sale
- Development (ZAC and ZAE concerted development areas)

#### **REAL ESTATE DEVELOPMENT**

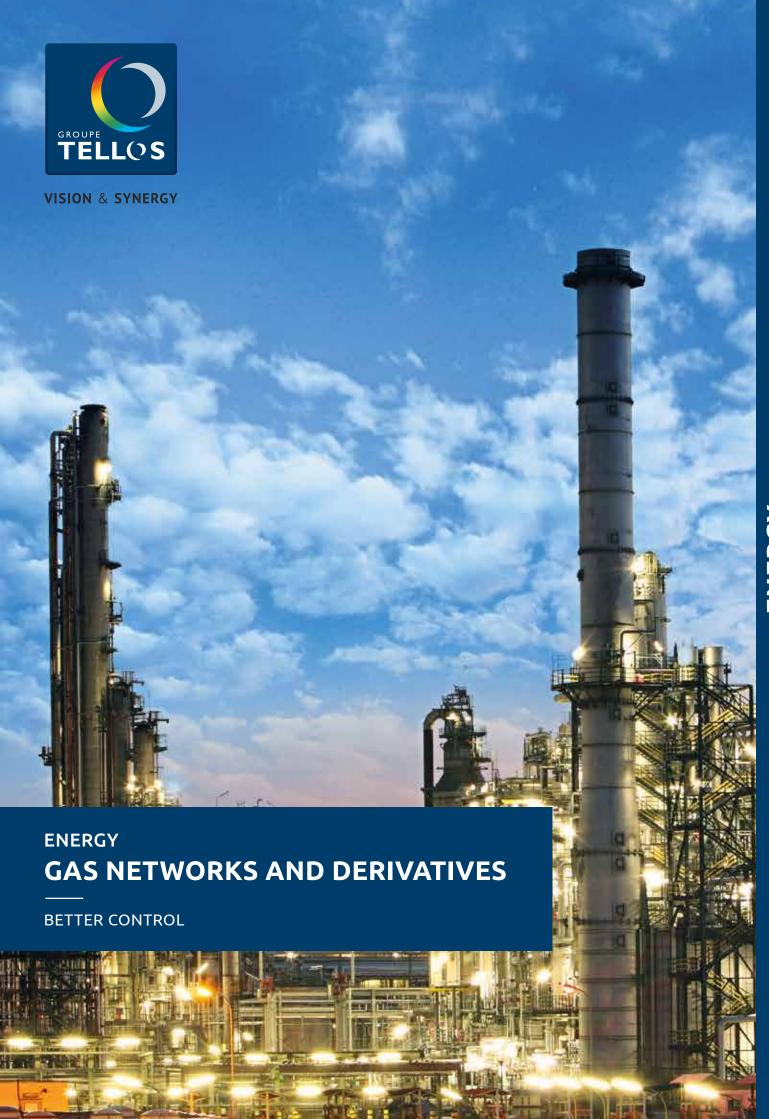
- Housing
- Buildings for business use
- Retail
- And everything needed for our cities, towns and villages...

ENVIRONMENT

#### **WASTE MANAGEMENT**

- Industrial
- Public works
- Construction





## **GAS NETWORKS AND DERIVATIVES**

#### **BETTER CONTROL**

TELLOS Group has long-standing expertise in the design, installation and maintenance of high, medium and low-pressure gas networks. The company possesses the top-level knowledge required for tackling any technical challenge for public and private services arising from work on utilities of all types (under pressure or not).

The gas distribution network offers competitive advantages in terms of energy efficiency and the fight against climate change. Gas networks can rapidly **replace more polluting energy sources**, such as the coal and fuel used in older heating networks. It also provides the opportunity for developing **highly efficient**, **less polluting cogeneration systems**. TELLOS Group is consolidating its positioning by adopting an approach which **includes renewable energies**, such as green gas and biomethane.



#### **TELLOS ENGINEERING**

#### **OPTIMISATION OF EXISTING NETWORKS**

RENOVATION AND REHABILITATION STUDY.

- Opportunity to make use of existing networks for change in pressure.
- Feasibility study for rehabilitation of service connections.
- Qualification or requalification of networks, preparation of the DREAL (regional directorate for the environment, town planning and housing) document.

#### **GAS LED ENERGY TRANSITION**

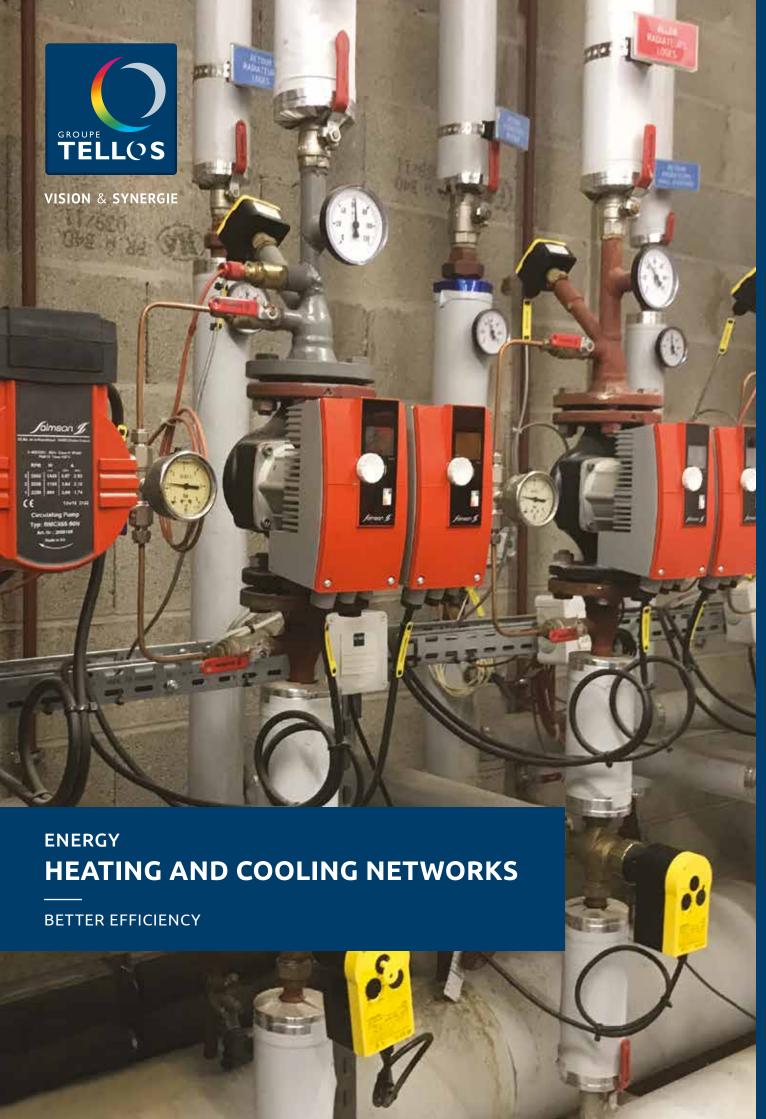
BIOMETHANE, SMART GAS GRIDS...

- Developing complementarity between the energies.
- Recycling of fermentable waste into renewable energies.

#### **DEVELOPMENT OF GAS INFRASTRUCTURES**

GAS PRODUCTION, TRANSPORT AND DISTRIBUTION.

- Project ownership support for planning and regulatory filings.
- Feasibility and viability study.
- Integrated solution consultancy for producing and injecting biogas.

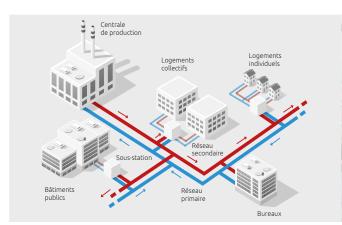


## **HEATING AND COOLING NETWORKS**

#### **BETTER EFFICIENCY**

TELLOS Group has developed unique expertise in the engineering, building, maintenance and management of major urban and industrial heating and cooling networks. The solutions we offer are based on smart and virtuous systems, such as biomass and recycling industrial heat. The Group's turnkey solutions also include the construction of boiler rooms and/or substations, with connection to the network.

TELLOS Group channels its expertise into improving production efficiency while using local and renewable energies. For public buildings and for industrial and other facilities, this means lower costs and better control of energy consumption.





#### **TELLOS ENGINEERING**

#### **NETWORK ANALYSIS**

#### OPTIMISATION OF EXISTING HEATING AND COOLING NETWORKS.

- Thermographic identification of thermal losses.
- Identifying weak points on the tubes by measuring thickness and monitoring changes.
- Measuring stray currents.
- Assessing the integrity of a double-wall system.
- Chemical treatment.
- · Support testing.
- Network expansion assessment.
- Installation audit: sizing, pressure drop, insulation, network balancing through the existing distribution network, pressure.

#### **DESIGN AND SIZING**

#### PRELIMINARY DOCUMENTS.

- Determining consumption and performance according to building type (service, manufacturing, crafts, etc.).
- Designing the distribution network on the basis of available installation techniques.
- Selecting the renewable heat source to bring down the system's carbon footprint.
- Working with local companies and organisations to find heat sources.
- Drawing up a Business Plan to optimise energy investments.

#### **PROJECT TRACKING**

## FROM THE BOILER ROOM TO THE SUBSTATION UP TO THE BUILDING

- Complete control of projects for hot and chilled water, steam and superheated water.
- Solutions offered include:
  - double wall, drain channel, pre-insulation, overhead.
- low, medium and high power heating systems.
- Piping sizing and expansion study, specification drawings.

#### SUPPORT AND CONSULTANCY

#### ${\it FEASIBILITY~AND~OPTIMISATION~OF~ENERGY~INVESTMENTS}.$

- Building energy and technical audit.
- Identifying and proposing energy opportunities.
- Project feasibility studies.
- Project ownership support.
- Drawing up regulatory documents.

#### REFERENCES





## **HVAC AND SANITARY ENGINEERING**

#### BETTER PERFORMANCE

As part of its network solutions, TELLOS also offers bespoke, fully optimised services for both new and refurbished industrial, service and collective buildings. The Group works with its clients for their climate control, ventilation and sanitary needs across a range of services from engineering to installation work and maintenance. Our full-service offering is driven by a multi-skill engineering office, specialists in designing tailored energy-efficient solutions.

TELLOS Group offers tailored, high-performance, innovative and smart solutions in line with today's building requirements, notably with regard to efficient control of resources and energy consumption. Building occupants enjoy optimal conditions, while the carbon footprint and costs relating to uses are significantly reduced.







#### **TELLOS ENGINEERING**

#### **NETWORK ANALYSIS**

#### OPTIMISATION OF EXISTING NETWORKS.

- Installation audit: sizing, pressure drop, insulation, network balancing through the existing distribution network (hydraulic and aeraulic), pressure.
- Compliance with standards regarding sanitary facilities for disabled persons.
- Chemical treatment.

#### SUPPORT AND CONSULTANCY

#### FEASIBILITY AND OPTIMISATION OF ENERGY INVESTMENTS.

- Building energy and technical audit.
- Identifying and suggesting energy opportunities (solar panels, thermodynamic or hygro-adjustable CMV, etc.)
- Project feasibility studies.
- Project ownership support.
- Drawing up regulatory documents.

#### **DESIGN AND SIZING**

#### PRELIMINARY DOCUMENTS.

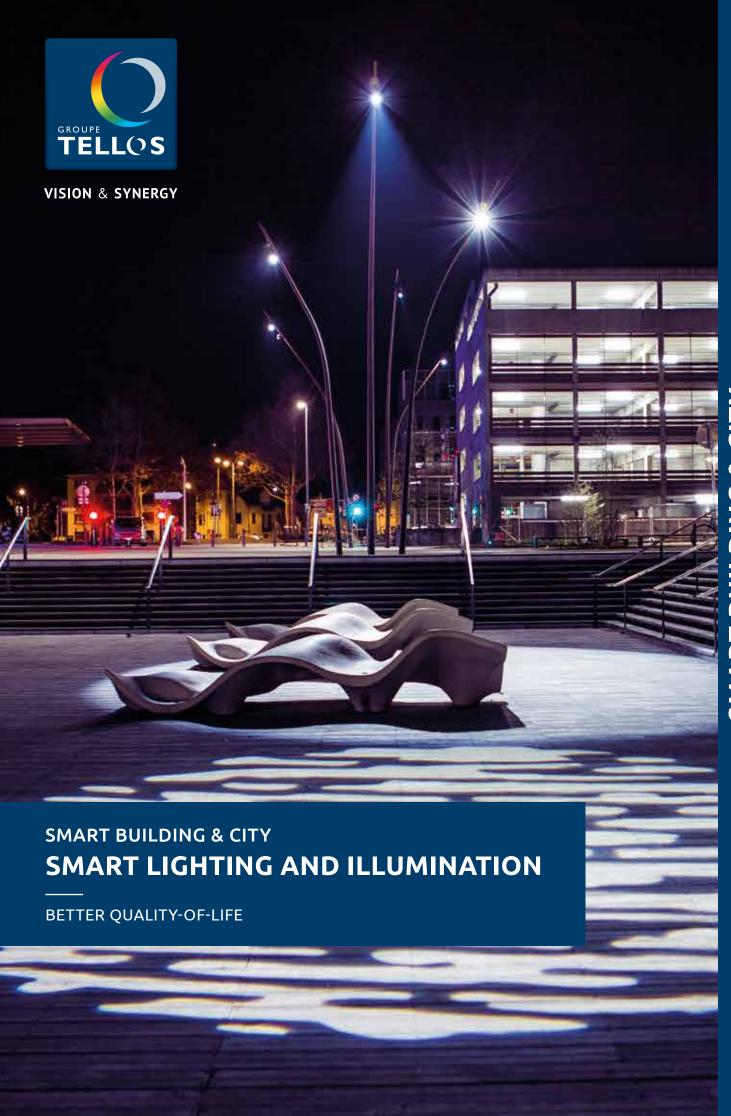
- Determining consumption and performance according to building type (service, manufacturing, craft, collective housing, etc.).
- Installation of sanitary facilities (toilets, individual or shared bathrooms, etc.).
- Designing the distribution network on the basis of available installation techniques.
- Finding energy sources in line with available resources and user needs.
- Drawing up a business plan for optimising energy investments.

#### **PROJECT TRACKING**

#### FROM THE PLANT ROOM TO THE TARGET ZONES.

- Complete control of projects for chilled water systems.
- Solutions include:
  - climate control: from single split to refrigerated unit.
- air treatment: from CMV (Controlled Mechanical Ventilation) to AHU (single and double flow Air Handling Unit)
- sanitary: sanitary facilities, compliance wit requirements for disabled persons.
- Facility sizing study, specifications and drawings.

#### REFERENCES



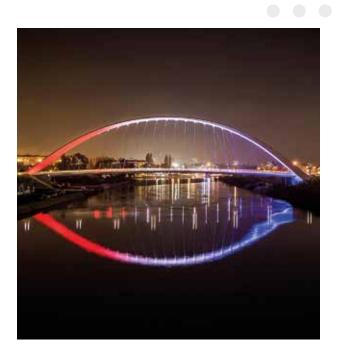
## **SMART LIGHTING AND ILLUMINATION**

#### **BETTER QUALITY-OF-LIFE**

TELLOS Group offers a comprehensive range of services, including illuminations for standard and special occasions, lighting for major sports facilities or enhancing historical buildings, rationalising city lighting systems and analysis of lighting units. The Group's expertise covers all the latest innovations, including media façades, interactive lighting and LiFi (Light Fidelity) applications, which utilise light to transmit data.

TELLOS Group helps local authorities to adopt a responsible and smart public lighting system, which can reduce energy consumption and system maintenance and which can act as a driver for innovation in the provision of services to users, such as Wi-Fi relays, smart parking tools and information.

LiFi can be used in buildings for many applications, including data transmission and internet use in buildings prone to interference or which are not connected to a network.



#### **TELLOS ENGINEERING**

#### **MAINTENANCE AND OPERATION**

ASSESSMENT OF LEGACY SYSTEMS, CMMS, SUPERVISION-SYSTEM MANAGEMENT.

- Inventory of legacy systems, creation of databases.
- Measuring illumination and mechanical stability.
- Drawing up action plans (energy savings, photometric quality).
- Computerised maintenance management system for controlling maintenance costs.
- Managing and programming existing supervision systems.
- Updating ongoing project data.
- Reprogramming (reducing power or modifying illumination system).

## **DESIGN** *INTERCON*

#### INTERCONNECTED URBAN NETWORKS.

- Designing electricity networks, electrical cabinets.
- $\bullet$  Designing lighting studies.
- Development of the lighting system by pooling urban services such as Closed-Circuit TeleVision and parking.
- Energy-saving illumination of buildings and monuments.
- Calculating and managing facility life cycles.
- Needs-based technology options.
- Responsible selection of equipment.
- Designing projects with short-term economic viability.

#### **TECHNOLOGY WATCH**

INNOVATION, R&D, EXPERT KNOWLEDGE IN KEY AREAS.

- Utilisation of communication techniques in accordance with field conditions (wire system, carrier current, radio).
- Development of "connectable systems".
- Management of connected systems.
- Setting up an networks infrastructure to allow for the future expansion of the IoT (Internet of Things).
- Expert knowledge in key areas for the future smart city (BIM, LiFi, LORA...).

#### SUPPORT AND CONSULTANCY

FEASIBILITY, ENERGY SAVINGS PROGRAMME, FINANCIAL ENGINEERING.

- Identifying and proposing opportunities for energy savings.
- Setting up funding solutions (leasing in an investment or operating budget, certificate of energy saving etc.).
- Project ownership support.
- Drafting regulatory documents (connection requests, Consuel certificates, etc.).





## **ELECTRICITY NETWORKS**

#### **BETTER FLOW**

TELLOS Group's expertise in electricity also extends to turnkey solutions for flow control, access control and remote surveillance, in addition to charging stations and solar panels. The Group offers specific traffic-flow control and coordination solutions for each project.

TELLOS Group works with local authorities to set out and implement their **urban mobility plan** to improve **traffic flow**. Particular emphasis is placed on preventing congestion and traffic build-up through traffic light and regulation systems designed to give priority to public transport. Installing CCTV will help prevent urban nuisances, while access is controlled by barriers or bollards. Users' increasing electrical energy needs **require a broader range of energy sources**, **while keeping their costs down**. Whenever possible, TELLOS Group sets out to enhance the existing environment through reasoned and controlled use of new technology.



#### **TELLOS ENGINEERING**

#### **MAINTENANCE AND OPERATION**

ELECTRICITY DISTRIBUTION AND TRANSPORT NETWORKS.

 High/low voltage as part of multi-technical services or Facilities Management for the electricity distribution and transport network.

#### **TECHNOLOGY WATCH**

INNOVATION, R&D.

- Services provided through IoT urban furniture.
- New services (bike and scooter hire, etc.).
- Integration and recovery of renewable energies in existing facilities.

#### SUPPORT AND CONSULTANCY

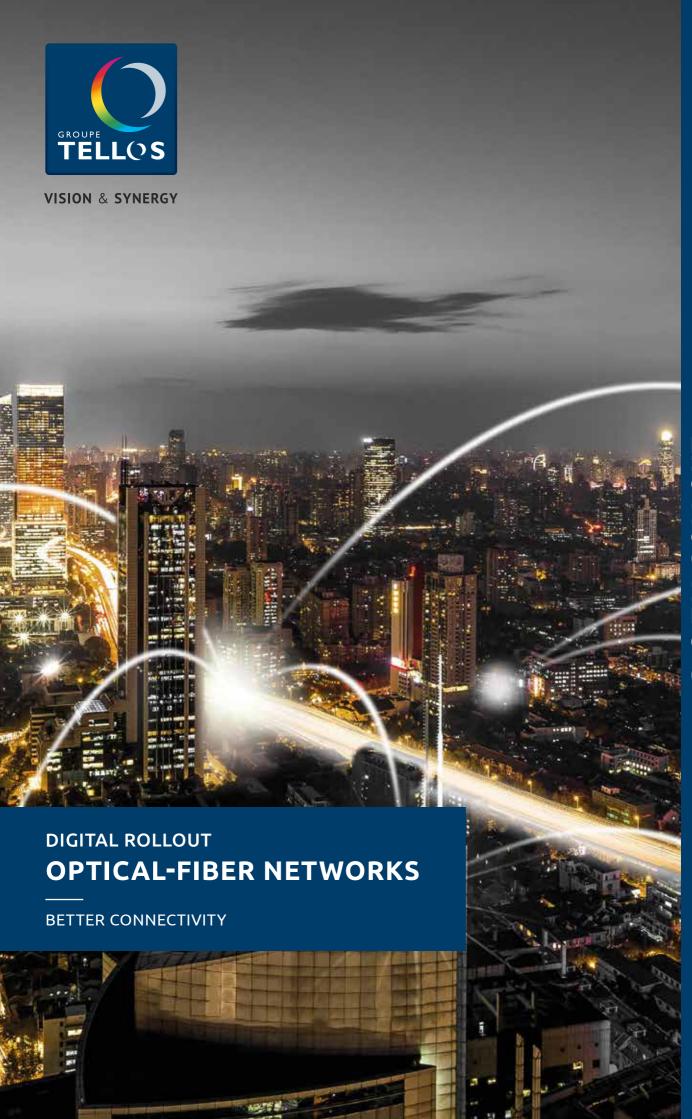
FEASIBILITY, ENERGY SAVINGS PROGRAMME, FINANCIAL ENGINEERING.

- Set up funding solutions (leasing in investment or operating budget, certificate of energy saving etc.).
- Project ownership support.
- Regulatory documents (connection requests, Consuel certificates, etc.).

#### **DESIGN**

CHARGING STATIONS, SOLAR PANELS, ACCESS CONTROL AND SUPERVISION, TRAFFIC-FLOW CONTROL.

- Costing of network infrastructures for new developments such as business parks, housing estates and urban neighbourhood restructuring.
- Design of charging stations for electric vehicles, including cars and bicycles, sockets (flip-out, site, WiFi, USB, etc.).
- Study and sizing of a solar panel system for electricity feedback or self-supply (lighting, signalling, CCTV, IoT (Internet of Things), internet access points, information panels, vehicle-activated speed indicators, etc.).
- Study for access control (terminal, number-plate scanner, barrier, badge, vehicle detection loop, intercom and CCTV).
- Study for installation of crossroads traffic lights, including synchronisation controller, radar detection (vehicle-activated speed indicator, smart green light) or pedestrian light (signalised pedestrian crossing).
- System pooling.
- Optimisation of system architecture when fitting street electrical services.



## **OPTICAL-FIBER NETWORKS**

#### **BETTER CONNECTIVITY**

With optical-fiber increasingly finding its place both in households and in companies (FTTH, FTTO), the way is open for everyone to be able to use new digital spaces and services. TELLOS Group offers a high-performance, quality-driven solution emphasising cost efficiency.

The Group uses its technology to create opticalfiber networks to meet demand from local authorities, cable operators and the private sector. The networks we create are all graduated and tailored to individual needs. We work with regional and local authorities right from the preparatory stage of projects. With its impressive portfolio, the Group can offer telecommunications operators its engineering and works expertise (directional drilling). Solutions for industry and business are based on individual need and are designed to factor in constraints such as special security requirements or the need for business to continue as usual during installation. The Group also offers an optical-fiber leasing service and has an L-33 operator licence (recognised by ARCEP).



#### **TELLOS ENGINEERING**

#### **DESIGN AND ROLLOUT**

#### FEASIBILITY STUDIES AND DESIGN CALCULATIONS.

- Preliminary technical and financial studies.
- Design of all types of network (FTTH, FTTLA, etc.).
- Design of the fiber infrastructure.
- Design calculations for maintaining optical-fiber networks.
- Drafting civil engineering plans.

#### **DEDICATED PROJECT TRACKING**

#### CUSTOMER PROCESS MANAGEMENT.

- Independent scheduling unit.
- Creation of customer and project-specific processes.
- Project scale-up for industrialisation.

#### **MAINTENANCE AND OPERATION**

#### MANAGEMENT OF INSTALLED NETWORKS.

- Management of specific customer contracts.
- Scheduling preventive maintenance plan.
- Creating and managing safety stock.
- Updating GIS indexing, as-built drawings and topographic measurements.



**VISION & SYNERGY** 



BETTER CAPACITIES



## **RADIOCOMMUNICATION**

#### **BETTER CAPACITIES**

TELLOS Group has extended its digital expertise to cover radiocommunication (radio, Hertzian frequency, WiFi, 5G) helping end-users to access new mobile multimedia and very high-speed mobile internet services. The Group's turnkey solutions range from identification and negotiations of land for installing antenna installations (for purchase or leasing), to engineering, project management, construction and maintenance.

TELLOS Group works alongside local authorities to come up with the solution providing the best network coverage and call-quality for users, while avoiding local network saturation. Additionally, the Group will provide a complete system for maintaining infrastructures over time, while keeping costs to a minimum. TELLOS services also include leasing a high point or an area on an existing site, as well as hosting equipment or antenna.



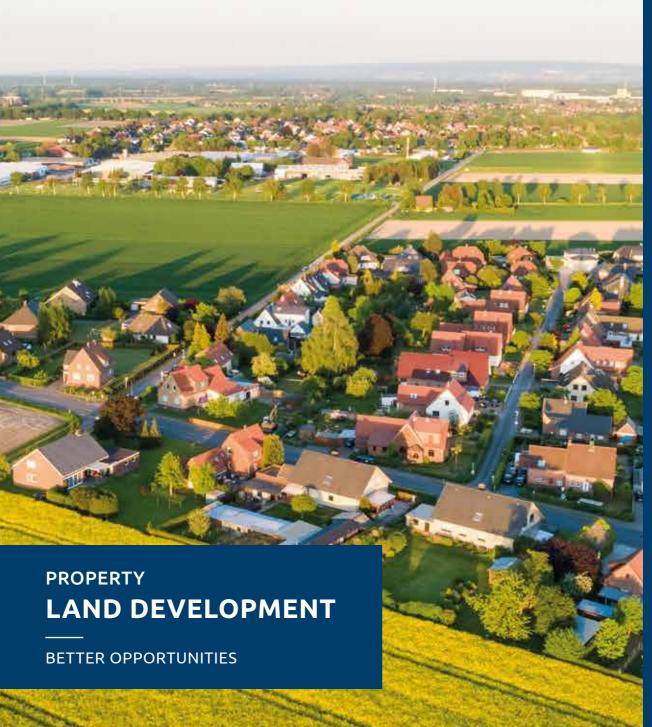
#### **TELLOS ENGINEERING**

#### **DESIGN AND ROLLOUT**

LAND, FEASIBILITY STUDIES, PRELIMINARY DOCUMENTS...

- Locating and purchasing land, including the relevant permits.
- Purchase or leasing of land or pylons.
- Radio/HF and load studies for new sites or for developing existing sites.
- Architectural integration and compliance with regulations concerning bâtiments de France and listed sites.
- Drafting of planning-stage documents, including preliminary outline, final design and tender documents (DOE).
- Comprehensive site solutions and studies: climate control, alarm/CCTV, water tightness.
- Project management (permits, logistics and supply, asset management, safety and security).





## LAND DEVELOPMENT

#### **BETTER OPPORTUNITIES**

TELLOS Group has been involved in land development for over 10 years, through its specialist affiliate and offers comprehensive solutions ranging from greenfield purchase (private or communal or public/private), to reselling serviced lots, including administrative procedures and funding. The company will also develop ZAC concerted development areas for industry, logistics companies (e-commerce), office buildings, hotels and leisure facilities (restaurants, sports centres, etc.).

TELLOS Group provides assistance for local authorities in implementing their urban development plans, factoring in the latest developments in urban planning embracing social and generational diversity. The **business parks of the future** are also set to change, with the latest technical innovations helping to improve the environment and user satisfaction.





## PROPERTY DEVELOPMENT

#### **BETTER VERSATILITY**

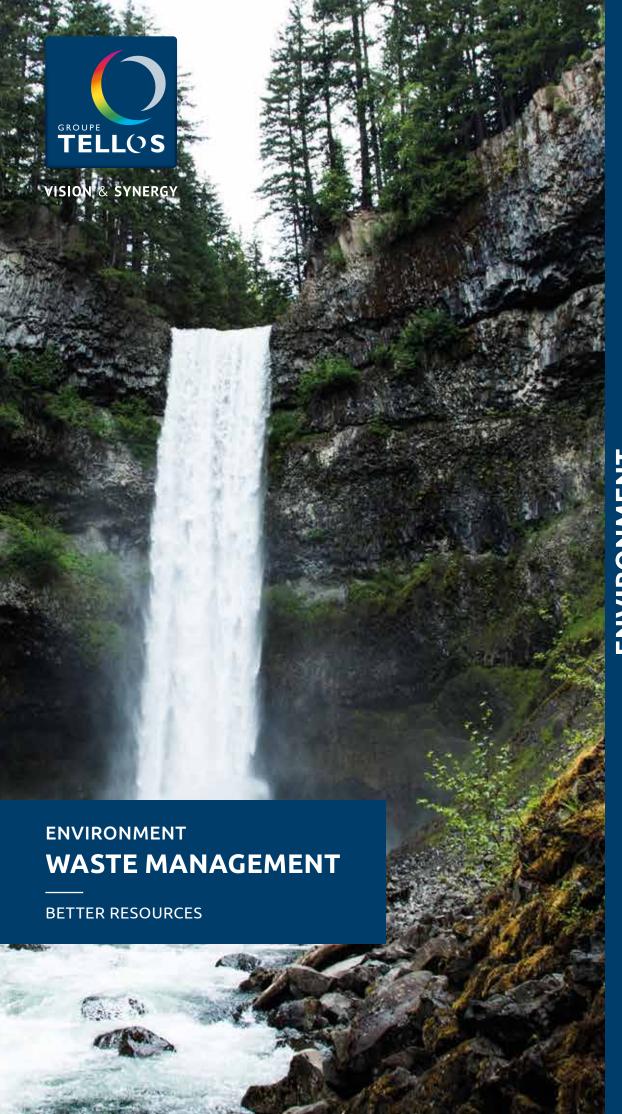
TELLOS Group develops bespoke, turnkey realestate projects which mirror its demanding corporate values. The Group applies its expertise to developments of all sizes, in business parks, residential areas and in buildings, for both new builds and urban refurbishments. Working through its specialist affiliate, it offers its investor, owner, corporate or private clients the opportunity to develop residential, production, office and other business buildings.

The Group works with expert partners, including notaries, engineering offices, architects and specialist companies, to put together **effective financial and legal packages** for all types of innovative developments, perfectly in tune with the needs of both investors and endusers. The projects are all centrally coordinated from beginning to end in full compliance with programme, costs and lead times.

Our projects represent the future of property development. Respect for the environment, top-quality work and enhanced energy performance are what make attractive neighbourhoods, the driving forces for local communities.







## WASTE MANAGEMENT

#### **BETTER RESOURCES**

The Group manages the storage of inert waste from building and public works sites. Whenever possible, the waste is recovered and reused in, for example, road construction and embankments. Our emphasis on using natural or recycled materials underpins our policy of investing in sustainable development and in reducing the wastage and pollution generated by the modernisation of our towns and cities andthe maintenance of network infrastructures.

Innovation based on anticipating the future can only be successful when taking the present into account. This is the underlying theme behind TELLOS business of rehabilitating contaminated sites and the management of industrial waste. The Group is based in a region previously dominated by heavy industry, and the rehabilitation of contaminated industrial wasteland was one of the key tasks it was asked to perform in its early days. We now have considerable in house experience in managing hazardous waste, such as oil refuse.











YOUR ENERGY SYSTEMS. OUR NETWORKS.



**VISION & SYNERGY** 

TELLOS. The Earth.

The earth teaches us more about ourselves than all the books in the world, because it is resistant to us.

Self-discovery comes when man measures himself against an obstacle.

Antoine de Saint-Exupéry,
Wind, Sand and Stars.

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**WWW.TELLOS.FR** 

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