



**SHAPING
RESOURCEFUL CITIES**

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Introduction

SUEZ, PART OF THE RESOURCE REVOLUTION



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By 2050 there will be **9.6 billion inhabitants** living on our planet, **most of them concentrated in cities.**

In such conditions, how can we provide a **sustainable water supply** and ensure access to **drinking water of the highest quality** for all citizens?

With 10 million tonnes of waste produced worldwide every 24 hours, how can we guarantee **effective waste management** when there will be 2 billion more of us?

The world is experiencing a new stage in its history, a turning point that all industrial companies, municipalities and citizens will have to take in order to achieve a sustainable development. After accompanying important social developments in hygiene and public health in the 19th century, and in urban comfort in the 20th century, SUEZ is now taking up the challenge of the 21st century – **the smart and sustainable management of resources in an exponentially growing world.** The Group is transforming its businesses and has redefined its mission – **securing together the essential resources for our future.**

Today we must challenge traditional models and innovate.

Together we must move forward towards a **circular economy by considering resources not as an inexhaustible reserve from which we can draw indefinitely, but as a flow that we must generate and regenerate infinitely.** It is no longer only a case of helping cities and industries reduce the impact of their activities on the environment, but of helping them **rethink their resource management** – optimising their practices through information technology, recycling, recovering, and creating alternative resources.

In this field, SUEZ is already a key player supplying, for example, 10 million people with drinking water produced from seawater, and transforming waste into high quality secondary raw materials and local, renewable energy sources. From key player, the Group aims to become a vital reference in recovering and securing resources.

Thus the Group is mobilising its strengths, its expertise and its capacity for innovation on a global scale to create more efficiency on a local level. All SUEZ employees are ready to become players in the resource revolution, now adopted by an increasing number of our customers. In Paris, Barcelona, Casablanca, New York, Beijing, Melbourne and Santiago... SUEZ employees are motivated by the same will – using their audacity, enthusiasm and creativity to offer customers efficient and sustainable management of their resources.

16.3 MILLION TONS OF WASTE RECOVERED

7 TWh OF ELECTRICAL AND THERMAL ENERGY PRODUCED

5.2 BILLION M³ OF DRINKING WATER PRODUCED

4.3 BILLION M³ OF WASTEWATER TREATED BIOLOGICALLY

A NEW URBAN ERA

To withstand these changes, cities must now reinvent themselves and combine urban renewal, social cohesion and sustainable development. SUEZ is ready to take on this challenge alongside its municipal customers in France and abroad. The transformation is characterised by **4 key issues**, on which local representatives are particularly focused:

✓ **Growing urbanisation**

Today the planet has 7.3 billion inhabitants, 53% of whom live in towns and cities. This trend is set to accelerate – by 2050, 2/3 of the global population – some 6 billion people - will live in an urban environment.

Moreover, by 2030 there will be 41 megacities of more than 10 million inhabitants, over half of which will be in Asia (compared with 10 in 1990 and 28 in 2014).

✓ **Increasing competition between cities**

Today, 600 cities (of which 380 belong to developed regions) generate 60% of global growth. By 2025, 136 new cities in developing countries will have joined them.

Urban competition is becoming intense – to attract investments, house factories and offices, and draw visitors and new residents.

✓ **Financial pressure**

Following the economic and financial crisis in 2008, local authority budgets have come under pressure. In France, government contributions are falling – with cutbacks in 2016-2017, they stand at approximately 3 billion a year between 2014 and 2017.

These financial constraints are also a reality outside France. In the USA, 51 local authorities filed for bankruptcy between 2010 and 2015, 9 of which were cities, municipalities or counties including Detroit¹.

The expectations of citizens in terms of budget management, governance and transparency are also becoming more demanding.

✓ **Higher expectations from citizens**

Citizens are looking to improve their living environment - accommodation, employment, education, transport etc. - seeing urban space as a place for personal development.

Some testimonies:

“The Smart Nation vision will make our economy more productive, our lives better and our society more responsive to people’s needs and aspirations,” Lee Hsien Loong, Prime Minister of Singapore

“By developing a smart city we are aiming to find solutions to reduce existing expenses and optimise the use of resources thanks to better digital innovation techniques and information technology. The focal point will be fairer distribution of resources and the improvement of the daily life for Pune’s citizen– more job opportunities, a boost to skills, a healthier environment, cheaper transport, a focus on health and physicalshape , better accommodation and other infrastructures,” Kunal KUMAR, Municipal commissioner of the city of Pune in India.

¹ Source Governing

Welcome to the resourceful city



SUEZ sees tomorrow's city as a **resource city**, drawing on its own assets to **regenerate, develop and strengthen its attractiveness**

© SUEZ / William Daniels -Wan Chai Ferry Pier

The Group supports elected representatives and citizens as their cities undergo this transformation, with a new vision of the city that must be:

- **Circular**

The resource city must be able to **(re)generate the essential resources for its future**.

- **Resilient**

It has the capacity to **adapt to events** so as to protect its inhabitants and return to a normal functioning as quickly as possible.

- **Collaborative and inclusive**

It **appeals directly to its citizens and local authorities** to come up with new services and to **build solutions** and **new urban services** together with all stakeholders.

THE THEORY OF THE “DOMINO CITY”

We should not think of a city as a coherent block, nor as a juxtaposition of systems and independent networks. Rather it is a **complex combination of interdependent elements** such as transport, health, environment, energy etc.

An **action on each of these elements can have a favourable impact on the city as a whole**. For example, an action on transport will have consequences for the environment and therefore for the health of the city's inhabitants.

This approach also holds from a **geographic point of view**. Selecting and revitalising certain districts could, by propagation, help boost the whole city much more efficiently.

Building on its **expertise in managing resources and urban projects**, SUEZ offers an **integrated vision of the city** (environment, transport, energy, urban lighting etc.) and **provides its project and business expertise to all city stakeholders to build together a resource-creating city that is a pleasant place to live**.

SUEZ, a long-standing expert in complex urban systems

As a **long-standing player in resource management and an urban solution integrator**, SUEZ provides its experience, its knowledge and its innovations to all city stakeholders so they can build together the city of tomorrow. ©SUEZ / William Daniels - ETAP de Sant Joan Despi



From its beginnings, SUEZ has provided its expertise to public authorities and has continued to develop industrial solutions. The water and waste networks the Group has developed integrate complex variables, adapt to requirements and pertain to a smart resource management system, the keystone of an intelligent and resourceful city.

To ensure territories attractiveness and to meet the expectations of the citizens, SUEZ draws on **150 years of expertise in complex urban system projects** based on 3 pillars:

1. Designing urban projects

- Innovative consulting and engineering solutions, integrating all technical, financial, environmental and social dimensions
- Support in seeking funding
- Designing sustainable solutions to meet emerging practices and expectations

2. Implementing innovative solutions

- Deploying solutions for securing together the resources that are essential for the future of the territories
- A strong partnership culture (technological, economic, financial, social and regulatory) that enables to deploy specific solutions to local issues

3. Operating and maintaining infrastructures

- Day-to-day support, including management of Customer/User relationship management
- Guaranteed functioning of infrastructures
- Continuous technical optimisation of facilities

UNDERSTANDING THE NEEDS OF LOCAL CITIZENS AND COUNCILLORS

By providing support to elected representatives and city stakeholders, SUEZ aims to take on the challenges of a city that combines growth, attractiveness and respect for its inhabitants and the environment.

Achieving this transition is **not only a question of expertise and technology**. It also requires to **develop project governance**, in order to ensure that projects are suited to the needs of territories and to maximise their environmental, economic and social performance through an approach favouring co-construction with stakeholders. Armed with this conviction, the Group is committed to involving its customers in the creation of new solutions.

In the same way, in response to a legitimate aspiration to greater **local democracy and transparency**, the Group provides local authorities with its experience in local dialogue and in facilitating access to information for users of its services, thereby enabling them to make informed decisions.

Ensuring the attractiveness of territories by satisfying people's expectations



Developping innovative, sustainable solutions that support public initiatives

These are some of the areas covered:

- **Environment**

As a growing urban population often goes hand in hand with increased pressure on natural resources, cities must reinvent themselves in order to continuously provide their citizens with access to water, efficient waste treatment, clean air etc. Technological innovation, renewable energy and smart management systems can enable territories to make the environment one of their principal resources.

- **Mobility**

As a key factor in quality of life and, more broadly, in the entire urban ecosystem (environment, economic and social fabric, links with other territories etc.), mobility affects air quality and the health of local inhabitants, climate change, the attractiveness of cities and their tranquillity. It has become vital for cities to design efficient, connected and flexible transport systems and solutions. In order to design such solutions, data from all players (operators, users etc.) must be collected, made available (open data), processed and exploited.

- **Efficiency**

Pressure on natural resources such as budget cuts requires cities to be managed more efficiently. This involves in-depth redesign of the city to optimise resources (energy, water, waste etc.), urban flow and all the services offered to local inhabitants.

- **Dynamism**

To adapt to changing situations, cities must be responsive and dynamic, not only on an economic level but also on a social and cultural level. Dynamism infers favourable economic, social and cultural conditions (employment, education, health, accommodation, public services, pastimes and leisure activities). In this way, cities can be sources of opportunity and growth benefitting both businesses and citizens.

- **Living environment**

Cities are paying more and more attention to their inhabitants and the environment in which they live. Quality of life, a key component of the attractiveness of a city, is determined mainly by housing quality, the labour market, green spaces, air quality and social interactions. Making the concerns of citizens in regard to these issues a keystone of their reflection on developing their territories, and taking them into consideration early on in any urban project process, is absolutely vital for cities.



Our references of Smart and Resourceful cities

Smart & Resourceful cities already exist.

SUEZ helps elected representatives and citizens design sustainable cities upstream and integrate intelligence at the heart of their services using “**smart**” management systems.

To do this, SUEZ uses **digital solutions** to collect and transmit data, then analyse it using advanced processing solutions that protect resources and supply services with added value. Digital solutions offer **better performance, improved control and greater transparency** when managing urban services and meet **shared governance** objectives.

In the water management business, digital solutions provide a **continuous and reliable view of the entire water cycle**, from production of drinking water to sanitation via consumption, using smart sensors and meters that ensure dynamic data collection. SUEZ deploys solutions throughout the water cycle, from remote meter reading to real-time management of water and sewage networks and provides new services to users.

In the waste management business, digital solutions optimise **collection and sorting services and help inform and raise awareness among local inhabitants**. When waste is sorted better it is recycled better, resulting in optimal recovery. Solutions provided by SUEZ ensure more efficient collection services both from an economic and environmental point of view, as well as new management systems such as billing features that encourage consumers to recycle.

Thus solutions based on digital technology enable all stakeholders to be involved in the optimal management of resources resulting in lower environmental impacts.

Tomorrow, **these cities will go from applying “smart” options in the services they offer to smart and sustainable management of their services**. Indeed, the application of technology to networks will give way to a **global approach to flow** as an ecosystem that must be balanced and made resilient.

DESIGNING A SUSTAINABLE CITY

MANDALAY - MYANMAR: Building a sustainable city with stakeholders

✓ Expectations



After decades of isolation, Myanmar is experiencing rapid economic growth, thanks, in particular, to a significant increase in the number of tourists visiting the country.

Among its many treasures is the city of Mandalay, the last royal capital and centre of Myanmar culture and Buddhism. With 1.25 million inhabitants, it is Myanmar's second largest city and its population is forecast to double over the next 25 years.

Economic sanctions imposed in the late 1980s hampered the country's development and blocked a large number of investments, particularly in services and infrastructures. Nowadays Mandalay is aiming to focus on sustainable development and promote "Mandalay Green City".

Resources deployed: developing and optimising municipal services and infrastructures

✓ Achievements

The solutions provided by SUEZ aim to improve water, waste and transport services, and enhance the energy efficiency and environmental performance of the city's services. An analysis of environmental and social impacts is launched in parallel, with the aim of assessing the issues, constraints and positive and negative consequences of the project.

Since 2014, SUEZ has been carrying out **feasibility and optimisation studies**. For each field of expertise, SUEZ is **analysing and designing concrete projects** that could be launched after this mission is completed. Some examples are:

- renovating and extending drinking water networks, reducing network leakages, rehabilitating the drinking water treatment plant, protecting groundwater,
- optimising household waste collection, installing transfer platforms, creating storage facilities,
- creating a high-speed public transport link.

Having won two contracts in 2014, to improve urban services and to provide technical assistance in wastewater systems, SUEZ went on to sign two new 7-year contracts. The Group provides technical assistance in the project to improve Mandalay's urban services. This project aims to improve sustainable urban services, including water supply systems, wastewater management and drainage systems and building capacity in urban service management. SUEZ will provide project management support to both the operating contractor and the municipality. SUEZ employees will help with global implementation of the project, detailed design, construction supervision and contract management. Technical assistance will also be provided on the project to supply drinking water and treat wastewater in Amarapura – the former capital of Myanmar, situated south of Mandalay – with a view to improving access to water and enhancing quality of service. This project is funded by the French Development Agency.

SUEZ is taking a step up from a sector-based approach by providing **multi-disciplinary expertise** to offer a more pertinent response to the challenges of Mandalay's sustainable urban development. The Group's involvement from early on in the process has strengthened dialogue with local authorities and will enable SUEZ to promote its expertise to other cities in Myanmar.

SUEZ is working alongside the Mandalay City Development Committee, the authority in charge of managing urban services in Mandalay. The project is supported by the fund for private-sector aid provided by the French Ministry of Economy and Finance (FASEP).

"There is a clear relationship between environmental services and public health. Mandalay is setting itself to become a green city, but a fundamental aspect of that is to have good environmental services that will attract not only tourists but also industries to the city of Mandalay," explained Gary Moys, ADB project preparation team leader.

SMART SOLUTIONS FOR MORE EFFICIENT CITIES

CASABLANCA – MOROCCO: Supporting the development strategy of the largest city in North Africa with a multi-service approach

✓ Expectations

Casablanca, the largest city in North Africa, is Morocco's economic and financial capital with 45% of its commercial transactions, 55% of its industrial production facilities and almost 60% of its workforce. The city is also the country's demographic centre with a growing population of 5 million inhabitants whose needs must be satisfied. Casablanca at night ©SUEZ - L'œil public - Michaël Zumstein



Casablanca has always been a laboratory for architecture and urban planning – in less than a century, the surface area of the city's built-up spaces has been multiplied by 150. Today, Casablanca is undergoing sustained development representing growth of 740 acres a year, requiring the equivalent in urban networks to be designed, built and linked up.

New models of development must therefore be designed to protect the city's natural resources whilst controlling the allocated budget.

Resources deployed: focusing on better analysis of the needs and expectations of local inhabitants, and on smart and innovative solutions in order to optimise public service performance.

✓ Achievements

For almost 20 years, SUEZ has been working alongside Greater Casablanca to supply water and electricity, collect wastewater and stormwater and provide public lighting for the region's 4.2 million inhabitants.

With a view to developing the circular economy, waste collection, recycling and recovery are also central to SUEZ's work in the city. Services cover urban cleanliness, designing and operating household waste recycling centres, and recovery of industrial production waste.

The Group is also carrying out studies into issues concerning hydraulic infrastructure, water and waste management, transport and mobility (including the Casablanca tramway) and energy-climate.

With the comprehensive support package SUEZ provides, the Group now plays an integrator role alongside public authorities, providing support for their development strategy. This role implies the capacity to analyse and share data collected from networks and provide better visibility of ongoing urban dynamics, in order to anticipate needs and prioritise public investment. Thus, the city protects its resources, optimises the performance of its public services and improves the services and satisfaction of its inhabitants.

✓ Innovative solutions

One of the solutions implemented in Casablanca is AQUADVANCED™, which offers smart management of water distribution networks and, in so doing, ensures better visibility of the network and early detection of anomalies.



East Coast Anti-Pollution System, new large-scale plant offering 100% pollution control



Essential services provided to almost 90,000 informal settlements in the Greater Casablanca region

SMART SOLUTIONS FOR MORE EFFICIENT CITIES

BARCELONA - SPAIN: Making Barcelona a sustainable, user-oriented city thanks to urban data

✓ Expectations

As the administrative and economic capital of Catalonia, Barcelona is the second largest city in Spain in terms of population and economic activity and the 11th most populated city in the European Union. With almost 1.6 million inhabitants within city limits and over 5 million in the whole Greater Barcelona area, this global city enjoys a highly dynamic economy and cultural life.

Resources deployed: a strong focus on partnerships to forecast and anticipate social practices by converging services, infrastructures and new technologies.

✓ Achievements

SUEZ has been managing water distribution in the Greater Barcelona area for almost 150 years. SUEZ's expertise in the protection and sustainable use of resources is strategic for this region, which experiences periods of substantial water stress and torrential rain. In this early part of the 21st century, as we are seeing growing urbanisation and more stringent environmental legislation, water management is proving to be a complex affair. To meet these new economic and environmental challenges and users' expectations, the city has chosen to work with SUEZ. By undertaking strong commitments in terms of protecting the environment and encouraging economic growth, the Group is offering the Catalan city its combined expertise in water, energy and new information and communications technology (ITC).

✓ Innovative solutions

Around the world, 35% of the drinking water flowing through water systems is lost, amounting to 49 billion m³ of water a year. This is why SUEZ is continuously innovating to develop solutions to **monitor water networks in real time, to prevent leaks, to act immediately and to ensure optimal water quality for the population.** One of these solutions is AQUADVANCED™, implemented in Barcelona. ©SUEZ
Aquadvanced Barcelona



AQUADVANCED™ monitors **drinking water networks in real time**, using sensors that monitor the hydraulic behaviour of the network, allowing **anomalies to be detected and water quality to be monitored.**

The AQUADVANCED™ solution guarantees local authorities an improvement in the performance of their drinking water network, thereby extending its lifetime while optimising costs by adjusting to new challenges in the water sector. For the consumer, the tool offers more efficient customer service, an improvement in water quality and pressure, and fewer water cuts caused by network maintenance. It also enables local authorities and water operators to share information more easily.

AQUADVANCED™'s modular dashboard of the network's performance gives local authorities access to mapping of drinking water networks by hydraulic sector, and monitoring of sensors in real time (flow, pressure, level, quality). It enables local authorities to manage rainfall events and helps in decision-making by cross-analysis of anomaly indicators to detect the source of network problems as quickly as possible. It also supplies reports and detailed analysis of water distributed, using graphs to show water quality, pressure, flow and reservoir levels. AQUADVANCED™ also offers an energy management solution that helps reduce drinking water operating costs whilst saving water and energy. How? By providing real-time access to electricity rates, thereby enabling drinking water demand forecasts to be updated almost instantaneously. By optimising pumping strategies, local authorities are guaranteed the best economic efficiency whilst supplying consumers with drinking water 24/7.

SMART SOLUTIONS FOR MORE EFFICIENT CITIES

BORDEAUX - FRANCE: Boosting the region's dynamic growth using smart technologies for managing water, waste and energy services

✓ **Expectations**

Bordeaux Métropole is nowadays a major metropolitan area recognised in France for its attractiveness and its many assets. It is France's third largest agglomeration with over 700,000 inhabitants. This figure is expected to reach one million by 2030. It is also regarded as an economic model, with numerous competitive hubs and high value-added sectors (aviation, aeronautics, biotechnology, eco-industries, digital etc.), as well as a qualified and skilled workforce recruited from its higher education and research institutes.

With these assets and this dynamic development, the city aims to become one of Europe's major cities for the 21st century. To achieve this goal, the city has undergone vast urban and economic transformation over the past 15 years, featuring a number of structuring projects.

Another feature of the region is the city's long-standing relationship with water, located at the head of the Gironde estuary and in the heart of a hydrographic system that includes over 150 streams. The geographical position of Bordeaux makes it vulnerable to a large number of issues affecting the protection and promotion of the city's urban and natural heritage.

As a major city on the move, Bordeaux has chosen to take up the challenge by using smart technologies to develop its water, waste and energy management systems.

Resources deployed: adopting a strong regional focus and building on Smart expertise to establish Bordeaux as an avant-garde reference in smart and connected management solutions.

✓ **Achievements**

For almost 30 years now, SUEZ has been working alongside Bordeaux's local authorities to tackle issues associated with urban development. The Group is helping to make the city a Smart Water laboratory and has developed **VISIO**, a management centre providing a 360° view of water and sanitation services.

It is a genuine **nerve centre** grouping together all the teams, tools and digital technologies needed to manage and monitor water or sanitation services provided within the region in real time. Data is collected using sensors installed in the networks, plants and water meters. This data is transferred in real time to the centre where it is analysed by specialist teams. The information enables employees to supervise operations at all times, anticipate the impact of external events on operations (construction work, pollution etc.), manage and analyse technical alerts, while ensuring continuity and quality of service. VISIO therefore guarantees **enhanced responsiveness when planning work** on the ground, as well as **better performance** of equipment and networks (energy optimisation for plants etc.).

Furthermore, VISIO **improves the transparency and governance** of utilities. Local authorities have access to all the data for their utilities, enabling them to **control their assets**, and also to **offer new services** for users and keep them **informed** (real-time monitoring of water consumption, consumption forecasts etc.).

Bordeaux has also chosen the digital management solution for sewage networks, **AQUADVANCED® Urban Drainage**, which monitors the environment (rivers, sea, networks), anticipates the risks of both flooding and pollution of natural habitats, and offers predictive and responsive management of the city's entire network. RAMSES remote control centre © SUEZ / William Daniels



This solution offers **a comprehensive, real-time view of the entire sewage network** using data collected via sensors located both in the network and in the natural environment (rivers, watercourses etc.), and from short-term weather forecasts. By centralising and analysing all the data, the software solution can anticipate the hydraulic performance of the network (saturated storage capacities, volumes to be treated etc.) or of the natural ecosystem (e.g. risk of pollution or overflowing watercourses). The tool can also calculate the best control strategy and automatically and remotely monitor the system's facilities (reservoirs, pumping stations etc.).

SMART SOLUTIONS FOR MORE EFFICIENT CITIES

SINGAPORE: Developing Smart Water technologies and customer-oriented services

✓ Expectations

Natural resources are at the heart of Singapore's concerns, making water management a national priority. Already densely populated with 5.4 million inhabitants, the island is faced with continuing population growth, urbanisation and industrial development, all of which exert ever-increasing pressure on its already limited resources.

✓ Achievements

Singapore's national water agency (PUB) is calling upon the expertise and Smart Water technologies offered by SUEZ for the sustainable management of its water resources. A memorandum of understanding that covers a renewable 5-year period, includes share expertise and jointly develop technologies designed to protect water resources and raise awareness among both consumers and industrial companies of the need to preserve them.

✓ Innovative solutions

Three research projects on Smart Water and energy-efficient wastewater treatment technologies are currently underway. Their aim is to develop sustainable management of resources.

Consumers are encouraged to protect water resources through the analysis of real-time consumption data obtained using **remote reading** of water meters. SUEZ was the promoter and pioneer of long-range Smart Metering in Europe. With 2.6 million remote meter readers sold in 2009, the Group now leads the way in this innovative solution. Although it was initially designed for water, the SUEZ system is interoperable with other flows (gas/electricity/heat).

The remote reading service enables operators to **manage municipal consumption** by sector (buildings, parks etc.), to identify leaks in the water network and to detect fraud. By limiting losses in the network, it also helps to prevent potential damages. The service is ideal for monitoring remote reading of water consumption in large tourist complexes, sports and leisure centres, hospitals, schools and universities, parks and gardens, and industrial sites.

The remote reading service enables individual consumers to **manage their consumption online**. An alarm system detects continuous consumption or can be set to alert the consumer if consumption goes above a certain limit. The user can access updated information at any time via the internet. The leakage and over-consumption alarm is a highly appreciated feature among users who are reassured by this day-to-day, real-time monitoring service and welcome the assurance that their bill is based on actual consumption. By improving the efficiency of the distribution network and offering tools that enable users to manage their water consumption, the service has been seen to offer savings of about 10% in the cities in which it is available.

Singapore is also thinking of developing an energy-efficient wastewater treatment process that would involve reducing energy requirements during the treatment phase and maximising energy production from sewage sludge.

SUEZ's AQUADVANCED® Urban Drainage solution, which monitors sewage networks in real time, reduces the risks of flooding and controls the quality of discharge into the natural environment, is also currently being launched in Singapore.

"Until now Singapore has tackled the risk of water shortage thanks to our imagination, ongoing research and tests, and the set up of technology to overcome our water challenges. PUB's collaboration with SUEZ is the latest of our partnerships with like-minded agencies and companies around the world to advance water research and to ultimately enhance Singapore's water supply," said Peter NG, Chief Executive of PUB and Executive Director, Environment and Water Industry Programme Office.

SMART AND SUSTAINABLE MANAGEMENT OF SERVICES

SAINT-ETIENNE – FRANCE: Combining services, infrastructures and digital solutions to build a socially responsible city together

✓ Expectations

For a number of years, Saint-Étienne has been undergoing a large-scale urban metamorphosis. Moving on from its industrial past, the city now aims to offer its inhabitants an enjoyable, cooperative way of life in a pleasant and sustainable environment. To achieve this, it is focusing on renovating old housing and creating innovative districts, developing its activities and transforming public facilities. The city is changing and reinventing itself in order to attract both inhabitants and investors.

Resources deployed: using urban data and practices to improve the living environment and boost attractiveness of areas undergoing renovation

✓ Achievements

Saint-Etienne is the first French city to develop and deploy a scalable, transversal digital platform.

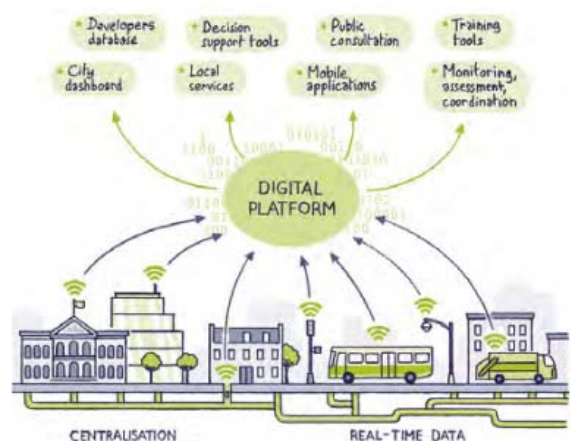
The Digital Saint-Étienne project won the MEDDE “Industrial demonstrators for the sustainable city” call for projects and the ANRU “Sustainable and socially-responsible city” call for expressions of interest. It came about through joint work by the city authorities of Saint-Étienne, Saint-Étienne Métropole, SUEZ and their partners. Its aim is to **establish a digital platform for the collection, analysis and delivery of urban data** (mobility, quality of life, urban services, infrastructures etc.).

The aim is to make the city more sustainable, more efficient, more attractive and more environmentally friendly, by bringing citizens and their practices back to the heart of the city’s urban and regional development concerns.

The project is considered as a priority for urban renovation. It will initially be tested in one district of Saint-Etienne, which is close to the city centre and then in two central sectors of the city in which large-scale infrastructures, including the third tramline and the “STEEL” shopping centre, will shortly be opening.

The enthusiastic participation of the stakeholders, the scalability of the platform and the transversal nature of its applications ensure that the project will be expanded to cover other districts of the city and potentially be replicated in other cities.

✓ Innovative solutions



“We must find new solutions to address precariousness such as (...) designing a highly ambitious, district-specific digital system to collect, manage and process scalable data (...) The aim is to boost the attractiveness of a district by making people want to work and/or live there,” said Gaël Perdriau, President of Saint-Etienne Métropole and Mayor of Saint-Etienne.