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Dear all,

This report summarises the activity of Nantes Métropole's services and all the actions undertaken by the 24 municipalities during the year 2020, which was obviously very exceptional, marked by the health crisis. This crisis, coupled with a major economic and social crisis, has already had a strong impact in our local area and on its inhabitants. Faced with these difficulties, we have nevertheless been able to work together to support the region's stakeholders, especially those in the economic and health sectors, whether by setting up an aid fund for health innovation, to support research into vaccines and treatments for COVID, or by implementing extensive measures to support our local businesses.

The future of our local area will be written together and we take the responsibility to shape it collectively. As citizens, you aspire to a vibrant, dynamic and resilient city. For this reason, we are fostering community dialogue, empowering citizens and creating new spaces for expression. Like the Citizens' Convention, which will be launched in the autumn of 2020, to draw the first lessons from the crisis while it is still fresh. This process enabled the diverse points of view to be heard and resulted in a broad and detailed opinion from the 80 members of the Convention.

Looking beyond the crisis, in the impetus of the new mandate that began in the summer, our city has rolled out all its assets and strengths to shape its future and write a new page in its history. It has done so by choosing to continue to invest heavily to become an increasingly resilient, innovative and exemplary city, particularly in terms of social and ecological transition. In 2020, Nantes Métropole invested 500 million euros in projects that are as ambitious as anticipated. These include the ongoing transformation of the Place du Commerce, the inauguration of the new mezzanine station in Nantes and the opening of the Bouaye and Vertou park-and-ride facilities with nearly 1,000 spaces.

Thinking differently about how we travel obviously means inventing a new low-carbon model. In 2020, the Metropolis continued to develop complementary modes of transport, in particular through the new Navibus, the promotion of carpooling, the pedestrian-bike plan, the P+R, as well as the River Loire by Bike circuit, with work underway at the Port à Bois in Bouguenais. Moreover, as climate issues and purchasing power are linked, we voted for a 20% reduction in the price of TAN season tickets at the beginning of the mandate, which allowed for effective implementation on the 1st of January 2021, even though free public transport on weekends and pollution days came into effect on the 24 April.

Our commitment to improving the daily lives of residents is reflected in a number of concrete actions, including preserving water quality, improving our waste sorting system and a renewed supply of housing that allows everyone to find a place to live, regardless of their income. We always act directly alongside residents to provide the most appropriate responses, whether it is a question of maintaining or redesigning the road system, public spaces and facilities or offering quality services, whether for waste collection, sanitation or the cleanliness of spaces. Nantes Métropole works alongside its 24 municipalities to support them in their development projects, local investments and improvement of the living environment: this is the case, for example, for the continuation in 2020 of the development of the town centres of Mauves-sur-Loire and Bouguenais. Once again this year, despite the pandemic, Nantes Métropole's local centres have undertaken numerous local development projects in the municipalities.

Our dedication also concerns health, a major subject at the heart of our action. Offering a public health service that is accessible to all, especially the most vulnerable, is essential and more than ever, in this

crisis period that we are going through, the new forms of precariousness must drive us to strengthen our action with the inhabitants.

It is also, more generally, the continuity of our action in working-class districts, notably with the urban renewal projects in the Château district in Rezé and Plaisance in Orvault.

Taking action for equality also means refusing exclusion. We must ensure that no one is left behind. This is the course we are following to meet all the challenges that lie ahead and it is one of the objectives of the homelessness fund that was approved at the last Metropolitan Council.

The future of our city also depends on the alliance of local areas and strengthened cooperation with its urban, suburban and rural areas. With this in mind, we are working actively within the Nantes - Saint-Nazaire Metropolitan Cluster and the Loire-Brittany Metropolitan Cluster. We can also rely on our reciprocity contract with the Pays de Retz, in order to make concrete progress on issues that stretch beyond our municipal or metropolitan borders, such as food, agriculture, air pollution or mobility.

Once again, the diversity of this activity report bears witness to the work accomplished in 2020 by all Nantes Métropole's staff, men and women who are fully committed and dedicated to their work, despite the difficult context linked to the crisis. I would like to take this opportunity to thank them for their dedication to public service and their professionalism, which enables them to manage emerging crises and invent the public policies of tomorrow.

Johanna Rolland
President of Nantes Métropole

Focus Areas

CONSOLIDATING THE METROPOLITANIZATION OF NANTES

In anticipation of Nantes' official change of status from a community of urban municipalities to a Metropolitan Hub on 1 January 2015, the Council of Municipalities adopted a "metropolitan pact" on 15 December 2014.

Bringing together the 24 local municipalities, the pact primarily aims to strengthen the appeal of Nantes Métropole at European level and reinforce its closeness to residents. Ultimately, the goal is to build a more innovative and efficient conurbation, where the local area's community and business leaders play an active part in its initiatives.

The metropolitan pact, the cornerstone of the initiative

The metropolitan pact is built on a number of founding principles:

- greater solidarity, particularly towards the least densely-populated municipalities, to ensure a balanced development;
- heightened efficiency with the addition of new major metropolitan facilities and the promotion of municipalities' potential to raise the collective profile in terms of sports, cultural and touristic appeal;
- more collective, open governance between the municipalities, with a remodelled development council and greater involvement of local stakeholders and citizens.

The pact's implementation has resulted in bold and deliberate measures such as the financial pact, the transfer of facilities to boost the appeal of Nantes Métropole, the transfer of skills to consolidate its capacity for action and the re-election of governing bodies, in particular the development council, to foster closer ties with citizens and interaction with stakeholders.

Some of the facilities transferred in the greater metropolitan interest include:

- the Musée d'Arts de Nantes; the Natural History Museum; the Castle of the Dukes of Brittany and the Musée d'Histoire de Nantes; the Planetarium; the Jules Verne Museum; the Rezé Heritage Interpretation and Animation Centre; the Chronograph; the Beaujoire Stadium and the José Arribas Training Centre; the Beaulieu Sports Centre; the ice rinks in Nantes and Rezé and the Couëron Velodrome.

Nantes Métropole now has wider powers in the following areas:

- archaeology to facilitate development, and particularly in terms of urban planning;
- opera and the lyric arts. The aim is to recognise the vital role played by Nantes Métropole and the Regional Council in the Syndicat Mixte Angers Nantes Opéra (SMANO: Angers-Nantes Combined Opera Syndicate);
- the development and funding of places in inter-municipal corporate crèches (tied to the main employment areas in the conurbation).

As of 1 January 2018, Nantes Métropole is also responsible for areas previously managed at departmental level:

- the Housing Solidarity Fund (FSL);
- the Youth Assistance Fund (FAJ);
- the Local Information and Coordination Centres (CLIC);
- the road network.

The pooling and cooperation plan

In place since 15 December 2015, the pooling and cooperation plan between Nantes Métropole and its 24 municipalities is grounded in the mayors' shared desire to develop greater solidarity and efficiency within the Metropolitan area. It sets out the principles for shared governance based on the sharing of skills by municipalities and the pooling of resources for their benefit. In doing this, it also aims to improve the level of service provided directly to residents through collective upskilling and more reliable public action.

The plan takes a variety of forms:

- closer cooperation between multiple volunteer municipalities with regard to library services, regarding the running of music schools and cost optimisation for swimming pools. Depending on the subjects and opportunities, the municipalities are also putting in place networks for exchange of professional practices or sharing of technical resources;
- buying consortia;
- the creation of 4 joint services between Nantes Métropole and the municipalities: the metropolitan Geographic Information System (GIS) and the Géonantes portal, document management and archives, the management of Land Use Authorisations (ADS) and the Urban Surveillance Centre (CSU).

Based on voluntary participation, the adhesion of the municipalities to this cooperation and pooling scheme has been strong from the start, with the 24 municipalities joining one or more of these common services, according to different levels of intervention:

- **the metropolitan Geographic Information System (GIS)** handles the pooling of tools, data and human resources, allowing the sharing of geographic data. In 2020, 24 municipalities are taking part in the first level of intervention and 21 municipalities are joining the second level (GIS). The start of 2020 was devoted to structuring the technical platform, involving organisation and access to shared and private databases, the management of rights and the definition of roles between the municipalities and Nantes Métropole. In addition, cross-cutting projects are giving concrete expression to the emergence of a common geographical data heritage, in particular the green space management project, the development of the "Election" application for searching for polling stations and presenting the results, and the launch of the Local Contingency Plan (PCS) project;
- **in terms of document and archive management**, an electronic archiving solution (SAE) is being studied for implementation by 2022. Since 1 January 2020, the 24 municipalities have been members of the first level of intervention, which covers the coordination of document and archive management. One of the main areas of work has been the mapping of applications and data to prepare for the dematerialization and archiving of public contracts and land use authorisations. In addition, seven municipalities are concerned by the second level of intervention for the follow-up of archiving procedures (payments and eliminations).
- **the shared service dealing with land use authorisations** aims to pool human resources and coordinate a network of land use authorisation instructors for the 24 municipalities. Following the adoption of the Metropolitan Urban Planning Scheme (PLUm) in April 2019, the service's main objective was to support the land use authorisation instructors and their managers in the development of their reference framework (PLUm/PLH - Local Housing Programme). To this end, a facilitator has deployed a PLUm training system. Group workshops were also organised within the network to develop training tools, exchange practices and practice training in line with the PLUm. The aim is to enable and facilitate inter-knowledge and dialogue between the instructing departments.
- **the urban surveillance centre (CSU)** addresses the objectives of improving the management of public spaces and the safety of people and property. In 2020, four municipalities are members: Nantes, Saint-Herblain, Rezé and Vertou. Its aim is to provide a better response to the public demand for safety and prevention and to combat the feeling of unsafety. The scheme supports the police and gendarmerie services in solving investigations and providing emergency assistance. NB: The cameras linked to the Urban Surveillance Centre are used solely for the protection of public spaces that are typically prone to significant levels of crime and have high traffic flows (urban centre areas, transport hubs and shopping districts). The department has 18 agents, including 15 specialized operators who manage the live cameras 24/7. This allows the comprehensive management of public order disturbances, regardless of the time of day or night.

Investment assistance funds

On 22 June 2018, Nantes Métropole approved the terms and conditions for drawing on the investment assistance fund to contribute towards building local facilities, managed on an inter-municipal basis and used by the residents of several municipalities. Three projects were identified: the Grand Bellevue childcare facility, the Orvault swimming pool and the Vertou central kitchen.

In 2020, the first agreement for the allocation of this assistance fund was concluded between Nantes Métropole and the Municipality of Saint-Herblain for the financing of the Grand Bellevue inter-municipal childcare facility. This is a facility dedicated to early childhood with 40 places, of which 13 places will be reserved for Nantes families.

INTER-METROPOLITAN COOPERATION

Over a number of years, Nantes Métropole has been developing collaborative relationships with neighbouring areas and other cities in western France. Working together, they harness their strengths and develop joint projects to establish western France as a force at national and international level.

In 2020, despite the unprecedented health crisis, Nantes Métropole continued its mobilisation in the cooperative ventures undertaken. Also marked in the middle of the year by the renewal of the executives of the various inter-municipalities, the year 2020 has made it possible to:

- **continue the work begun with the two metropolitan hubs** and to begin to define the outlines of the action envisaged for the next five to six years;
- **implement the first joint actions of the reciprocity contract between Pays de Retz and Nantes Métropole** signed in June 2019, on the subjects selected together (food, mobility, economic development and tourism);
- **give a new dimension to the alliance of local areas in order to** develop cooperation between Nantes Métropole and all of its neighbouring local areas (meetings with "new" local areas, exchanges between elected representatives on priorities, awareness-raising in the departments).

Nantes-Saint Nazaire Metropolitan Area (PMNSN): solid cooperation continues

Often cited as an example of success at national level, the collaboration between Nantes and Saint-Nazaire has been built on solid foundations spanning over twenty years and harnesses actions led by the Nantes and Saint-Nazaire metropolitan area.

The "SCoT 2" master plan, designed to ensure consistent development across the metropolitan area, has been in force since 2017. This "new generation" SCoT, which was approved on 19 December 2016, paves the way for the five public inter-municipal cooperation establishments (EPCIs) - Nantes Métropole, Saint-Nazaire Agglomération, Estuaire et Sillon, Pays de Blain, Erdre et Gesvres - to make significant progress towards greater consistency in their development strategies, especially those concerning housing, the economy, the environment, urban planning and mobility. Its main guidelines are now enforced in urban planning documents such as Nantes Métropole's Metropolitan Urban Planning Scheme (PLUm), Local Housing Programme (PLH) and Urban Travel Plan (PDU).

As part of the master plan, the local areas commit to reducing their land consumption for housing and activities by 50%; for the first time, a green and blue belt has been designated across the SCoT scheme; the urban framework has been bolstered to focus population growth and economic development, and 100,000 new housing units (32% of which will be social housing) will be built across the SCoT scheme (between 5 500 and 6 200 new homes per year for Nantes Métropole).

In 2020, the Nantes Saint-Nazaire Metropolitan Area continued to implement its 2017-2020 action plan. The Metropolitan Area also continued an experimental initiative "Imagine the Peri-Urban Living Environment of Tomorrow" in four municipalities, including Brains, with the aim of addressing the difficulty of adjusting the housing supply to meet the changing needs of the general population.

Nantes and Saint-Nazaire, special links

In addition to the actions carried out by the Metropolitan Area, Nantes Métropole and Saint-Nazaire are also involved in productive collaborations in areas such as economic and digital development. The priority areas for collaboration are:

- the implementation of the Nantes Saint-Nazaire Développement strategy;
- strategic industry segments (e.g. aerospace, marine bio-resources, renewable marine energies, shipbuilding and digital technology), mainly through support for schemes designed specifically for the Nantes Saint-Nazaire area, such as PlugIN, Maia Mater, or jointly-organised events such as Digital Week;

- joint appearances at national and international trade shows such as the MIPIM (international corporate real estate fair) and the SIMI (national corporate real estate fair);
- introduction of a river freight service between Nantes and Saint-Nazaire, namely FlexiLoire, in partnership with the major maritime port authority.

The Loire-Brittany metropolitan area (PMLB): political coordination on current issues for the west of France

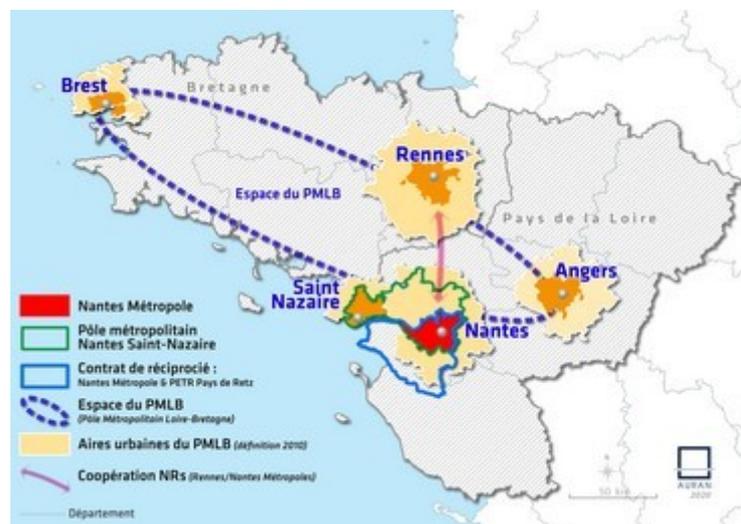
The major cities of western France (Angers, Brest, Nantes, Rennes and Saint-Nazaire) continued to work hand-in-hand in 2020, around the main watchwords of the PMLB.

- to raise the Loire-Bretagne region's profile both nationally and internationally for the benefit of all of the areas involved and their residents
- to work as a network;
- to promote dialogue and partnership between local areas;

The will to carry out joint projects is reaffirmed, on the improvement of rail accessibility in the Grand Ouest and on economic development by participating together in national and international trade fairs, with the prospect of completing these main projects (based on the exchanges initiated at the end of the year).

Nantes and Rennes, the backbone of western France

Launched in 2009, this collaboration promotes the two local areas at national and European level and contributes to the success of major projects in both cities. In addition to the initiatives implemented by the Loire-Bretagne metropolitan cluster, Nantes and Rennes are working together to boost culture, accessibility, higher education and research, international appeal and tourism. Although few significant actions are to be noted in 2020, the teams newly elected at the end of June in the two cities were able to reaffirm their commitment to these shared principles of cooperation.



THE INNOVATION AND DIGITAL TECHNOLOGY MISSION

Innovation and digital technology are an integral part of metropolitan planning. Nantes Métropole seeks to introduce innovative public services and support the innovative efforts of stakeholders across the local area. The aim is to factor in and support changes associated with digital technology and harness new forms of innovation to build the city of the future.

The smart city, as seen by Nantes, promotes a collaborative city that encourages stakeholder networking. Here, innovation - be it economic, technological, social or cultural - is everywhere; it's practised by all, for the benefit of all. It's a driving force in three key issues: boosting employment and supporting economic development; making the city an easier place to live; and supporting the energy and ecological transition.

Several flagship projects illustrate this ambition in 2020: the data strategy, actions to support digital mediation and the 7th Nantes Digital Week.

Flagship projects in 2020

Data Strategy

Data is increasingly present in daily life and in the management of cities. Everyone is concerned, whether as a citizen, an employee or a user of public or private services. Nantes Métropole has chosen in 2019 to define a strategic framework on this matter, which presents multiple ethical, legal and economic issues. It has drawn up the first charter setting out ethical principles to protect its citizens and to regulate the use of data in its local area. The project involves:

- Guaranteeing sovereignty over public service data;
- Protecting citizens' personal data;
- Ensuring transparency with regard to the data;
- Promoting new uses.

The local authority undertook to publish an annual report on its actions in terms of data management, data protection, transparency and ethics in the use of data. It made this first assessment public at the Data Fair in December 2020.

Although impacted by the health crisis, this first year of application of the Metropolitan Data Charter has been marked by the launch of numerous actions. These have made it possible to consolidate the structuring of a public data service that articulates both:

- the organisation of the data function within the local authority;
- awareness-raising among more than 150 managers of the challenges of data in their jobs;
- commitments regarding data sovereignty: 92% of the local authority's applications are hosted on the local authority's servers;
- actions regarding ethics and transparency: the first local authority to publish the code of its individual decision-making algorithms (solidarity pricing for water and transport) in the interests of transparency in public action;
- commitments in terms of sobriety: services such as public wifi or Nantes Dans MA Poche (Nantes in my pocket) designed to collect only the data necessary for the delivery of services;
- innovation projects: a first test carried out to develop a public and ethical artificial intelligence for school catering and the reduction of food waste. This will make it possible to anticipate several weeks in advance the number of children who will come to eat at the canteen.

This approach represents a proactive commitment by the local authority to anticipate, regulate and establish a protective and responsible framework for data, as well as a framework for dialogue with the players in the area.

Digital Mediation

Coordinating the digital mediation network

Following on from the work carried out in collaboration with the PING association, Nantes Métropole has led the digital mediation network. Meetings, face-to-face and then by video, took place with field actors working to support users in their digital practices in various fields of action: digital and access to rights and employment, development of digital culture, support for young people (school and extracurricular time).

To date, there are about a hundred structures, both public and associative, working in the field of digital mediation on a metropolitan scale. On the basis of this network, a coordination of actors has been set up to meet the needs of users in relation to the crisis (equipment/accompaniment).

The deployment of Aptic passes

In November 2020, Nantes Métropole deployed "digital passes" (Aptic vouchers) across the local area in order to support the digitally vulnerable. A tool for fighting the digital divide, the scheme enables people to learn about computers and the Internet through local associations. A one-year experiment is being carried out with an evaluation shared with digital mediation players with a view to refining the offer and the "outreach" approach.

Thus, after responding to a call for projects from the State to benefit from funding, Nantes Métropole is deploying (in collaboration with the Loire-Atlantique department, with the support of the MSA Loire Vendée and the CoNum Hub) 2,000 booklets of 5 passes worth €10.

Distribution is taking place in the departmental solidarity spaces, employment units, CCAS, MSA reception and Accoord socio-linguistic workshops. The vouchers will be used in Aptic-labelled associative and private digital mediation structures.

Nantes Digital Week

Nantes Digital Week - "the week of digital culture of all kinds" - was created in 2014 with the aim of offering a time for reflection, contribution, training, practice, creation and exchange on matters of digital technology and its associated challenges.

The purpose of the event is to embody and demonstrate the plurality and density of what local actors are conceiving, creating and achieving in the digital field.

- gatherings in various formats (lectures, workshops, exhibitions, etc.);
- discussions among various groups (researchers, students, artists, start-uppers, VSE/SMEs, large groups, specialists, associations, insiders and lay citizens, etc.);
- a programme put together in collaboration with local stakeholders (companies, associations, researchers, schools, etc.).

In five years, Nantes Digital Week has developed into a major event that brings together a steadily growing number of contributors and attendees.

From 17 to 27 September, 92 events (half of which were aimed at professionals and the other half at the general public) were organised by 235 project leaders. Organisers had to adapt to the health situation: maintain part of the events in person when the number of participants and the nature of the event allowed it, switch to 100% remote or imagine hybrid systems.

In total, 14,200 participants were able to train, learn, have fun, build, and meet each other over the course of 10 days around the achievements and projects made possible by the many uses of digital technology in our lives.

In connection with the COVID-19 crisis, this edition was marked by innovative initiatives in the fields of inclusion, design & digital, culture and responsible digital.

Among the emblematic events of this 7th edition:

- the "Forum des Initi@tives" event, co-sponsored by Nantes Métropole, the Cité des Congrès and the Fondation Internet Nouvelle Génération (FING) - 150 participants;
- the exhibition "Towards infinity and beyond", organised by Stereolux - 2,600 participants;
- the "Tech for Good" days dedicated to responsible digital, organized by La Cantine - 90 people (30 people on site and 60 people streaming).

INSTITUTIONAL PARTNERSHIPS

Nantes Métropole has nurtured a longstanding collaborative relationship with its institutional partners in Europe, France, the Pays de la Loire region and Loire-Atlantique département.

These partnerships provide a means of ensuring that the various local public policies are consistent, coordinated and complementary.

In 2020, despite the unprecedented health crisis, Nantes Métropole has continued its work as part of these partnership arrangements, enabling our partners to contribute to the financing of our projects.

2020: a year of transition

With the national and regional governments, the first discussions on the future planning agreement between the national and regional governments (CPER) 2021-2027 took place in January, rather quickly disrupted by the health situation. Discussions then focused on the **various steps** taken by both national and regional governments (including as the managing authority for European funds - React-EU plan) to revive the project, the outcome of which is expected during 2021.

Furthermore, with regard to the current planning agreement between the national and regional governments (CPER) (2014-2020), Nantes Métropole deliberated in June on a third rider to the metropolitan agreement updating the co-financing of the State and the region for major operations (work to improve the fluidity of the Nantes ring road; development of the Cheviré area with the Grand Port Maritime).

With the regional government, this is the year in which the metropolitan development contract comes to an end. All of Nantes Métropole's and the municipalities' applications have been submitted for the planned period of 2017-2020. As part of the regional recovery plan, **a new allocation** is proposed: **the regional inter-municipal recovery fund** (€3.8M for the metropolitan area, 30% of which is reserved for municipalities).

In parallel, the consultation on the ERDF 2021-2027 programming was held in the form of video-conference workshops (September 2020).

Together with the Departmental Council, the CD44 has decided to close the support scheme for the local areas involved since 2017 in 2020 in order to offer the municipalities and inter-municipalities a new framework for intervention in 2021. All the applications have been submitted and Nantes Métropole has been consulted on the implementation of this new contractualisation on its area.

The Departmental Council's regional support scheme

The Loire-Atlantique departmental council has set out the procedure for its support of local areas in the 2017-2021 period, designating four priority areas:

- Developing social housing;
- Education, to cater for population dynamics;
- Mobility, to develop alternatives to car travel;
- Digital technology.

Within this framework and in continuity with the projects supported over the previous three years (e-busway, studies related to the tramway, structural cycling facilities, traveller reception areas, development of the Feydeau-Commerce mobility hub, cycling facilities between La Chapelle-sur-Erdre and Nantes Nord), Nantes Métropole has submitted the latest eligible operations negotiated with the Departmental Council.

Nantes Métropole has also mobilised credits negotiated in support of urban policy districts, for projects restructuring public space or benefiting municipal facilities (Nantes, Saint-Herblain, Rezé, Orvault). At the same time, the preparation of the new system proposed by the Departmental Council was the occasion for exchanges throughout 2020.

The Metropolitan Development Contract with the Region

In December 2016, the Regional Council approved its new contracting policy for 2017-2020. It is implemented essentially through Metropolitan Development Contracts (MDCs), which are meant to address the specific challenges facing the Urban Communities of Angers, Le Mans and Nantes Métropole.

As such, Nantes Métropole and the Pays de la Loire region signed the MDC for Nantes Métropole, worth €17m, on 27 July 2018.

The contract incorporates operations at metropolitan level and those managed at municipal level, benefitting from a fund of €5m that has been earmarked and shared between the municipalities on a pro rata basis according to the number of inhabitants. A solidarity fund of €60,000 has also been set aside for the smaller municipalities in the conurbation.

The metropolitan area's four priority areas, as set out in the contract, are:

- Land use planning projects and mobility;
- Nantes Métropole's cultural and tourist appeal;
- The energy transition;
- Economic development;

In this respect, after supporting the e-busway project (deployment of electric charging stations - €1 million contribution + €1.5 million SMILE programme), the relocation of the MIN (€3 million contribution) and the Porte de Gesvres road development (€4 million) over the previous three years, in 2020 Nantes Métropole continued to discuss the preparation of future funding for the Arbre aux Hérons project (€4 million).

As the MDC's lead partner, Nantes Métropole also assists the municipalities in submitting their funding requests.

At the same time, the preparation of the new scheme proposed by the regional government provided an opportunity for exchanges in the second half of 2020.

The 2020 Local Investment Support Fund (DSIL)

Each year, the State specifies the main priorities for the DSIL aimed at supporting local authorities (thermal renovation, energy transition, digital development, construction of public facilities made necessary by the increase in the number of inhabitants, etc.).

Nantes Métropole and the City of Nantes have responded to this annual call for projects launched by the Prefect of Loire-Atlantique and have obtained €1.7M from the State from the 2020 allocation to finance the public spaces at the South Station, the construction of the Doulon-Gohards school and the extension of the École des Plantes.

This budget has been supplemented by credits from the recovery plan: €600k on the acquisition of buses for Nantes Métropole, two operations in priority education network schools (Groupe scolaire Urbain le Verrier for €367,886, and Alain Fournier school for €276,978) for the City.

As part of its participation in the Cordemais pact, the Metropole received €500k for the "tactical urbanism" operation (creation of cycle paths) and work to install photovoltaic panels on several buildings in the city of Nantes.

The ERDF in 2020

Nantes Métropole benefits from an ERDF funding allocation of €23.47 million for the period 2014-2020 (thirty or so projects in total).

Nantes Métropole, the City of Nantes and other municipalities have submitted four projects eligible for ERDF funding in 2020 (for a total amount of almost €1m) which concern the improvement of the hydraulic flows of the Pré Poulain catchment area (Carquefou and Thouaré-sur-Loire), the Garettes valley (section 3), the Gohards urban renewal project (investment in ecological recovery), Breil Barberie/Coubertin sector for the requalification of the area between Rue Feyder and Rue Plantes (core areas).

NB: further funding may be applied for depending on the nature of projects undertaken.

CONTINUING COMMUNITY DIALOGUE DESPITE THE CRISIS TO ADAPT PUBLIC ACTION

The 2020-2026 metropolitan project has reaffirmed the importance of community dialogue offering the inhabitants of the 24 municipalities the opportunity to enrich the projects and inform the public decision. This commitment was recognized by the award of the "iCapital" prize (prize awarded to the European Capital of Innovation). In 2020, faced with a pandemic situation that has disrupted the operation of Nantes Métropole and the daily lives of its citizens, the local authority has adapted to continue the community dialogue on essential subjects (new tram lines, active mobility, 5G, etc.). This has resulted in the implementation of dedicated dialogue forums related to the health crisis, which are rich in lessons for the conduct of public action.

Community dialogue awarded at European level: innovation "by and for all"

In September 2019, the title of "European Capital of Innovation" awarded to Nantes Métropole by the European Commission came to reward the commitment and know-how of the local authority in terms of community dialogue. It also highlights the diversity and dynamism of the metropolitan ecosystem in terms of innovation, which covers many fields, including: technological, digital, economic, social, solidarity, cultural and civic.

In this respect, on 8 and 9 October 2020, Nantes Métropole invited the players in the local area and its European partners to come and explore the possible futures in terms of shared governance and citizen and democratic innovation in a context of crisis. In this context, the "Nantes Innovation Forum" (online) highlighted testimonies and shared views. The event's programme was devised by Nantes Métropole, in partnership with Le Monde, Eurocities, the association La 27e Région and the Institute for Consultation and Citizen Participation. Numerous highlights were offered in the form of conferences, round tables, workshops and laboratories. It was an opportunity to compare the views of elected representatives, experts and local stakeholders and, in particular, to encourage reflection on the relationship between the local authority and its citizens.

A citizens' convention to decipher experiences in times of crisis and aspirations for tomorrow

At the end of the first lockdown, Nantes Métropole wanted to hear from the citizens of the 24 municipalities of Nantes Métropole about their feelings during a health crisis. In terms of work, housing and health in particular, how are the inhabitants of Nantes Métropole experiencing this moment and how do they envisage the future? Has this crisis given rise to new horizons, new aspirations for the future? On the contrary, has it reduced the field of possibilities? At the beginning of this mandate, a community assessment of the crisis was carried out in order to identify weaknesses in the local area and new desires for transition.

In September 2020, TMO Régions was asked to conduct a major metropolitan survey of 2,301 residents. This first exercise allowed us to identify major trends in consumption, work, travel, housing and civic engagement. At the same time, the local authority finalized a prospective literature review on lockdowns.

The Nantes Citizens' Convention, unanimously approved by the Metropolitan Council on 16 October 2020, seeks to deepen this initial overview. This time of consultation allowed us to step back from the events and to compare experiences and feelings. It was also a question of collectively sounding out the local area, in its diversity, its assets and its weaknesses in the health context.

80 citizens from all over Nantes Métropole were randomly selected (from the survey panel) to take part in this convention, which was supplemented by fieldwork.

On November 13, 2020, members shared their experiences of the crisis and formulated proposals for change at the scale of Nantes Métropole and more globally. Meeting during two working sessions by videoconference, the members debated and heard experts from the local area under the watchful eye of 4 guarantors in charge of ensuring the independence of their work.

The work continued during the first quarter of 2021 (report to elected officials on 11 March 2021).

"Street for All", the first participatory evaluation of the mandate

In connection with the health crisis, Nantes Métropole has set up temporary facilities for active modes of transport. The aim was to encourage walking and cycling and to ease traffic in the city by avoiding a major shift to using cars.

In addition, between June 2020 and January 2021, a participatory evaluation of the facilities was carried out in order to decide on their sustainability and to guide the deployment of active modes for the coming mandate.

The approach made it possible to objectify the uses and effects of the developments by involving all the stakeholders. The community dialogue platform collected more than 3,600 proposals and comments, while an on-site survey led to meetings with nearly 1,000 users (including 200 shopkeepers). Notably, a community of 40 citizen evaluators with different profiles provided an evaluative opinion on the developments (15 developments analysed). Two opinions (one on the 30 km/h city by the Mobility Policy Monitoring Group, one by the Metropolitan Council for Universal Accessibility) were also submitted by associations and retailers (observation of developments with the Mission Égalité). Finally, a sharing seminar attended by some fifty participants (agents, citizen-evaluators and associations) validated the observations and shared the recommendations.

Following the evaluation, the elected representatives committed themselves at the beginning of 2021 to changing the mobility policy in favour of pedestrians. 60% of the facilities are maintained with minor adaptations and 40% with more substantial adaptations (in particular, reopening of one direction of traffic on the Saint-Mihiel bridge and reopening of one lane of traffic on Quai de la Fosse in the outbound direction).

New horizons for the tramway

In June 2019, Nantes Métropole announced its intention to create three new tramway lines by 2026 and their possible extensions by 2030-2035. To share this project, a public consultation "New horizons for the tramway" was held from 26 October 2020 to 24 January 2021, under the aegis of two CNDP (Commission Nationale du Débat Public) guarantors.

The aim was to share with the citizens the reflections on the opportunity to create three new structural tramway lines, requiring in particular the transformation of the Anne-de-Bretagne bridge. This consultation also aimed to enrich the thinking on the hypotheses of future extensions of these lines (traffic routes, developments, etc.), taking into account the organisation of the public transport network for the PDU horizon, i.e. 2030-2035. Nantes Métropole has thus established a forward-looking dialogue with citizens on a longer-term vision of the organisation of metropolitan mobility. It is noted that:

- 14,000 people who consulted the consultation documents (Nantes Métropole's dedicated community dialogue site);
- more than 300 people exchanged with elected representatives and technical teams during the various events organised;
- 88 stakeholder papers (from associations, citizens' groups, trade unions, local political groups, municipalities) and nearly 800 individual contributions (with more than 900 comments) submitted via the website.

After publication of the report of the guarantors on 26 February 2021, a deliberation of the metropolitan council (April 2021) will inform the public of the first changes to the project resulting from this consultation.

A GREEN TRANSITION

For this new 2020-2025 mandate, the ecological transition is put at the top of the agenda more than ever. On the one hand, it is the continuous acceleration of subjects such as clean and sober mobility, climate, renewable energies, energy renovation, access to energy for all, the circular economy and the exemplary nature of Nantes Métropole. On the other hand, there are growing challenges to be met: environmental health, regaining biodiversity, healthy and sustainable food for all, responsible economic change, the impact of digital technology, etc.

Putting the green transition at the heart of metropolitan planning

Mindful of the environmental crisis and the responsibility of cities to provide solutions, Nantes Métropole has been committed to sustainable development for more than 15 years, an effort that was recognised with the title of European Green Capital in 2013. Since then, Nantes Métropole has accelerated, in particular following the Big Debate on Energy Transition 2016-2017, and has taken new steps by committing the local area and all its stakeholders to the energy and ecological transition, in order to reduce greenhouse gas emissions and protect the environment, health and quality of life of its citizens.

The year 2020 was marked by the start of a new mandate but also by the health crisis. The [sustainable development report](#), integrating this health issue, made it possible to analyse the first consequences on the ecological transition. A review was conducted of three areas that have been strongly impacted by the crisis: travel and tactical issues, food and teleworkin

Sustainable public procurement

The municipal council's adoption of the Responsible Purchasing Promotion Scheme (SPAR) in March 2017 provided a solid and sustainable foundation for the local authority's environmentally and socially responsible purchasing policy by setting clearly identified objectives and the terms and conditions for their implementation.

It is now time to take stock of this first edition, a preliminary and necessary step in the development of the next edition, which will have to translate the two major markers of the new mandate into purchasing actions: the ecological transition and equality.

The public procurement review carried out in 2020 for the period covering the previous mandate shows that almost 30% of contracts concluded include at least one SPAR target.

Unsurprisingly, the first objective taken into account in the contracts is inclusion. It is followed by the environmental component, in line with the priorities of the mandate. It should be noted that procurements made for the disability sector (ESAT, EA) have increased steadily over the term of office (by more than 56% from 2014 to 2018), with an increase of more than 5% between 2018 and 2019.

This data analysis work also made it possible to identify the geographic distribution of suppliers who hold contracts with our local authorities. The findings show that nearly 50% of the recipients of our contracts are located in mainland France, and 65% in the Pays de la Loire region as a whole.

In 2020, despite the health context, environmental concerns are sustainably integrated into practices: consideration of energy and climate issues (in line with the energy transition roadmap), particularly in building and road works, requirement for certified wood (production chain guaranteeing sustainable forest management), health requirements for paints, cleaning products and furniture.

Among the exemplary approaches to sustainable procurement, the following are particularly worth noting:

- energy, through the purchase of supplies and their consumption requirements (response to the most demanding Energy Star certifications for electrical and computer equipment, etc.) or with regard to the installations linked to the Christmas lights. In the same vein, the public

property maintenance sustainability programme is continuing its efforts to control energy consumption. Finally, the local authority contributes to the development of renewable electricity production facilities, either through its electricity purchases by dedicating lots to renewable sources, or by including solar power installations in its construction projects;

- Sustainable development is also a priority on a social level, with particular consideration given to the issues of inclusion and disability, particularly by means of contracts that make use of SIAE and EA/ESAT organisations through standard procedures or reserved contracts, e.g. for green space maintenance or laundry services. These purchases have remained level or even seen a minor increase. The fight against discrimination and for the promotion of equality has also been addressed in specific clauses in a number of service contracts, such as the graffiti removal contract, with the impacts currently under assessment.

THE COMMUNITY PROJECT

A diagnosis of the experiments generated by the COVID-19 crisis

As part of a "long-term" prospective approach aimed at better understanding the impacts of the health and socio-economic crisis, a diagnosis of experiments and innovations in Nantes and the metropolitan area during the lockdown was carried out from May to September 2020.

From an internal point of view, this time of listening revealed that the needs felt before the crisis have been amplified. Some are organisational: the need for simplification, flexibility, streamlining of controls and decision-making circuits, strengthening of digital equipment, etc. Others relate to attitudes: support for resource services (user approach), managerial attitudes (trust, delegation, right to make mistakes, continuous improvement, etc.). Some of them concern the organisation as much as the management: decompartmentalisation, place given to experimentation, project management, teleworking, efficiency of meetings, etc.

This long crisis has enabled us to experiment with certain solutions and to appreciate the benefits, both in human terms and in terms of results. Those who have experienced or observed it have been convinced and wish to continue the process.

Construction of the 2020-2026 community project with a phase of gathering information from the staff

In addition to the end-of-term assessment and the lessons learned from the crisis, the general management wished to begin the new term of office with a phase of gathering information from employees via various complementary initiatives, including a quality of life at work barometer.

The questionnaire launched in November among all employees of the City of Nantes, Nantes Métropole and CCAS (i.e. 8,640 employees) was well received with 3,979 respondents, i.e. an overall participation rate of 46%. The analysis of the quantitative results, supplemented by qualitative workshops in the first half of 2021, will make it possible to build a project adapted to the needs and expectations of the employees.

A CITY WITH AN INTERNATIONAL OUTLOOK

The international appeal of the local area is a key concern for the Nantes conurbation. To maintain and strengthen its profile, Nantes Métropole relies on both its values and its projects. With the help of various local stakeholders, the authority forms close partnerships with other major cities abroad.

Continued partnerships with Quebec

Over recent years, Nantes Métropole has forged close ties with Quebec, which have made it possible to develop a number of projects in both areas. Our digital ecosystems, cultural establishments, research and development centres and companies have all been closely involved in these projects. Sharing experiences and approaches helps to define and implement more efficient public policies.

These partnerships have been established largely through exchanges and structuring projects such as:

- the **cooperation between Nantes Digital Week and MTL CONNECTE**, with in 2020:
 - a delegation from Nantes 100% online MTL CONNECTE;
 - 50 participants from Nantes, 12 scheduled speakers, 1 workshop on Nantes-Québec exchanges;
 - mutual round tables.
- **ISEA (International Symposium Electronic Arts)** with in 2020:
 - 4 artists from Nantes scheduled remotely (via Stereolux collaboration).
- the **collaboration on the Nantes metropolitan data charter** and the Montreal digital data charter;
- the **Nantes data fair** (round tables).

Seven projects supported by Nantes Métropole and selected as part of the FFQCD call for projects for 2021-2023 were selected:

- the **association of Nantes Digital Week and Printemps Numérique** (organiser of the MTL CONNECTE digital week), with:
 - the production of a series of video interviews with Nantes and Montreal women to highlight the diversity of digital professions and women's careers and to challenge preconceptions;
 - the drafting of a joint Nantes-Montreal manifesto, in the form of a cross-view that would prefigure a desirable digital future.
- **Samoa and the Quartier des spectacles partnership:** the project aims to develop joint actions to organise the implementation, coordination and evaluation of a creative installation in the public space aimed at raising public awareness of climate change issues;
- the **partnership between Samoa and Zù:** called "Samoa x Zù", this cooperation project is linked to the creation and co-production of a cycle of inspiring events around the theme of cultural and creative industries as actors of cultural and urban renewal;
- **Arkham - Rhizome collaboration:** the Arkham sur Loire association, in association with Rhizome in Quebec City, is continuing the transmedia and transatlantic project "Conte des Estuaires Nantes-Québec", with a third chapter in 2020;
- the **association between the Compagnie Yvann Alexandre and the Maison pour la Danse Québec**, around the dance project "ARCHIPEL";

- the **MAPP Nantes video mapping festival, in partnership with MAPP Montreal;**
- the **cooperation between the Natural History Museum and the Musée du Fjord du Saguenay**, around the exhibition "LES INTELLIGENCES".

In terms of the economy, highlights included:

- 25 investment projects since 2018 monitored by Nantes Saint-Nazaire Développement (NSD);
- the establishment of Odiwi, Keitas Systems, Espace Creativ, Groupe Syd (Blackmeal Speakylink) in Quebec in 2020;
- the establishment of Quebec companies in Nantes, such as Osedea, Sensopia, Cgi, The Green Link (underway);
- the launch of the network of ambassadors in Montreal "Les Audacieux de Nantes Saint-Nazaire du Québec".

In terms of cultural activities, highlights included:

- A collaboration between the Maison de la Poésie and Rhizome, and the continuation of the residency exchange project;
- the continuation of the Maison Pour l'Architecture project, which is part of a joint call for decentralisation projects issued by France and Quebec (FFQCD), with financial support from the French and Canadian governments.

Finally, highlights in the academic sector included:

- the integration of the Nantes University Hospital into the Mother and Child Network for the French-speaking world (following the example of several university hospitals in France). Within this framework, the agents of the University Hospital regularly participate in the activities supported by the network (annual symposium, training courses, etc.);
- the regular hosting at the university hospital of Quebec medical trainees as associate trainees, from different universities and Quebec integrated health and social services centres (CISSS) (Montreal, Quebec, Rimouski). In 2021, a fellow (resident, intern) from Laval University in Quebec City is planned.

A presence in French-speaking exchange networks

As part of the International Association of French-speaking Mayors (AIMF), highlights include:

- the participation in the general assembly held in Tunis;
- the ongoing collaboration on the data charter.

PLAYING A KEY ROLE IN EUROPEAN NETWORKS

Nantes Métropole plays a key role in European networks, leveraging its relations with numerous European stakeholders to underpin its lobbying strategy. This strategy helps to raise Nantes' profile in Europe, which offers a strategic springboard for its international development: 80% of the trading operations by companies in the local area take place within Europe.

The relations formed within Europe provide an opportunity to take other European cities' experiences on board, highlight the success stories in Nantes and raise the local area's profile while defending the challenges faced by local authorities at European level. This strong presence in Europe is also a useful tool for obtaining EU funding, which is a powerful accelerator for the area's projects.

Nantes in Europe: playing a key role in networks

As an active member of various European networks, Nantes Métropole has the opportunity to make its voice heard in Europe on strategic issues such as employment, social and territorial cohesion, local public services, education, culture, climate change, responsible economic development.

This European presence is vitally important, since 75% of French national legislation now stems from European law. Decisions made at European level have a direct impact on local public policies. By playing an active role in European networks and nurturing its relations with European institutions, Nantes Métropole is able to influence European decision-making processes and protect the interests of the local area. Due to the health crisis, activities were able to continue online, thus maintaining a strong network dynamic, fruitful exchanges and continuous influence with the European authorities.

EUROCITIES: post-presidency strategy

From November 2014 to November 2016, Nantes Métropole acted as chair of the Eurocities network, which brings together 130 European cities of 250,000 inhabitants or more. Since 2017, Nantes has continued to play an active role in the governance and political influence of Eurocities. It now focuses its involvement on:

- social cohesion, employment, public service and corporate social responsibility (CSR);
- European contributions to the issues raised by the transitions currently under debate in the metropolitan area (i.e. social, economic, democratic, ecological and digital);
- the development of synergy at local level, by strengthening EU ties with the citizens and stakeholders of the local area.

While continuing to lobby European institutions, Nantes Métropole also remains active through the following special-focus forums:

- the **Social Affairs Forum**, which follows on from the initiatives conducted on social cohesion, employment, public services and CSR. The forum also promotes the European Pillar of Social Rights and the United Nations' 17 Sustainable Development Goals. Within this framework, Nantes Métropole was able to develop the social component of the government energy transition policy at the Stuttgart Forum in October 2019, as well as promoting the micro-credit scheme at the Annual Convention for Inclusive Growth held by the European Commission in Brussels. In May 2020, due to the pandemic, the Forum had to be held online. It was an opportunity to discuss the impact of the pandemic on the social sphere, highlighting the need to strengthen social Europe and to implement the European Social Rights Framework. It is worth noting that Nantes Métropole's "5 Bridges" project and "early childhood quality charter" were presented to the European Committee of the Regions. Nantes Métropole also leads the working groups on education and participates in the migration, employment, Roma integration and urban ageing working groups.

Finally, Nantes is involved in the following projects: "Cities4CSR" on the promotion of CSR by cities; "ON BOARD" on innovation in education; "ACPA" on the adaptation of European cities to an ageing population;

- The **Economic Development Forum**, chaired by Nantes Métropole (2019-2020), works primarily in the fields of innovation, CSR and new forms of economy in general (circular economy, sharing economy, social and solidarity economy, etc.);
- The **Culture Forum**, of which Nantes is vice-chair of the Working Group on art in public spaces;
- The **Environment Forum**, in which the energy transition roadmap and the new Local Climate, Air and Energy Plan were shared and discussed as part of the Working Group on Air Quality, Climate Change and Energy Efficiency.

Nantes Métropole's ongoing action can also be seen in the following cross-cutting Working Groups:

- **Creative Citizenship**: by co-chairing this working group with Athens, Nantes is involved in mobilizing citizens around the idea of Europe, by launching awareness campaigns and enhancement and exchanging their lengthy experience in this area;
- **Public Services and Public Procurement** Nantes Métropole represents the network's cities in the Urban Agenda Partnership on Innovative and Responsible Procurement, which aims to use public contracting as a tool for cities' overall strategy and sustainable development. This also allows it to promote Nantes' approaches and to influence European legislation on the subject;
- **Cohesion Policy**, to defend the role of cities in the structural funds.

AFCCRE/CCRE

The Association Française du Conseil des Communes et des Régions d'Europe (AFCCRE) brings together some 1,500 local authorities, municipalities, departments, regions and groups of municipalities. The Council of European Municipalities and Regions (CEMR) brings together national associations, including the AFCCRE. Nantes Métropole is a member of the AFCCRE/CEMR office, tasked with assisting and advising municipalities in their European activities and approaches, including the research of information, contacts and funding available for their transnational projects. It carries out ongoing monitoring of EC legislation so that local and regional authorities can anticipate the consequences at local level.

Nantes chairs the AFCCRE's Environment and Sustainable Development Commission.

SIG Europe (formerly CEEP)

Nantes Métropole is a member of SIG Europe, the new name since December 2020 of the European Centre of Employers and Enterprises responsible for providing public services (CEEP). Several Nantes-based local semi-public companies (Sociétés d'économie mixte) and local public companies (Sociétés publiques locales) are also involved: NGE, La Folle Journée, Semitan, La Cité Nantes Events Center and Nantes Métropole Aménagement.

This organisation, a partner in the European social dialogue, defends general interest service companies in Europe, particularly in the context of the post-COVID economic recovery. It also works in the field of CSR.

Following on from the presidency of CEEP France since December 2015, Nantes has been chairing SIG Europe since December 2020. It is worth noting that the city has also been a member of the general assembly advisory committee of CEEP Europe since June 2018.

Climate change: a major European and international issue

Nantes Métropole continues in its commitment to energy transition and combatting climate change.

Within the framework of Eurocities, it is involved in the environment forum (meeting cancelled in 2020) and in particular in the "climate change" working group, formerly the "Air quality and climate change" working group (now split into two separate groups in order to better address climate change issues in cities). Nantes Métropole is also participating in the strategic climate roundtable initiated in September 2018.

In 2020, at the request of Eurocities, Nantes made a major contribution to the consultations carried out by the new European Commission on the redefinition of climate and environment policies (biodiversity, adaptation, GHG emissions, Green City Accord, European Green Plan, etc.).

Since autumn 2019, Nantes has also been involved in the "100 Climate Neutral Cities" mission (Mission Cities), a new European programme to support cities in their transition to climate neutrality (launch in 2021). Through its participation in the various bodies, Nantes was an active supporter of the creation of the Mission Villes.

Note: Nantes Métropole organised a European webinar on the Mission Villes during the Nantes Innovation Forum 2020. In addition, Ronan Dantec became CEMR's climate spokesperson in 2020, following his mandate as climate/environment/sustainable development spokesperson at AFCCRE (French Association of the Council of European Municipalities and Regions).

The special partnership with Hamburg

In 2017, Nantes and Hamburg signed a multi-sectoral partnership agreement for the 2017-2020 period. The operational implementation of this ambitious agreement has since made it possible to support a large number of European Cooperation Projects between partners in the two areas, particularly in the fields of economic development and culture.

The year 2020 was marked by the reaffirmed will of the partner cities to strengthen their cooperation by negotiating a new strategic agreement, which will be signed in 2021. The Nantes stakeholders involved in the partnership with Hamburg are fully involved in these discussions through their regular participation in a Nantes-Hamburg steering committee, led by Nantes Métropole.

Nantes Innovation Forum (Oct 2020)

Nantes, winner of the European Innovation Capital Award 2019/2020, organised the Nantes Innovation Forum in October 2020, bringing together a large number of European experts in all fields related to innovation. All the European networks in which Nantes participates were important partners, contributing to the success of this Europe-wide online event, in partnership with the daily newspaper "Le Monde".

A EUROPEAN AND INTERNATIONAL CITIZENSHIP PROGRAMME

Nantes Métropole's desire to interact more fully with Europe and the international community can also be seen at local level: the city offers its inhabitants a fully-fledged European citizenship programme that allows them to benefit from the various European and international experiences on offer.

This goal is achieved through events and schemes that encourage a European outlook in the people of Nantes, and through Nantes Métropole's support for a number of associations that are helping to develop a sense of European citizenship with a global outlook, in Nantes.

Sharing European and international issues with citizens

Active European and international citizenship requires a good understanding of the issues raised by Europe and globalisation in our local area. In this way, Nantes Métropole offers opportunities to think about and discuss topical issues, by inviting European and international personalities and experts to debate with its inhabitants.

- 9 May 2020: the Festival of Europe: initially planned as a face-to-face event, this event has been reinvented in the context of the health crisis by offering a remote programme (broadcasting debates, concerts and games on its social networks throughout the event);
- 25 and 26 September 2020: 8th edition of the "Geopolitics of Nantes": for the 8th consecutive year, the Institute of International and Strategic Relations (IRIS) and the Lieu Unique offered citizens a programme based on ten round tables according to a protocol adapted to the health crisis. The round table led by Nantes Métropole was entitled "The effects of the pandemic in Africa - international cooperation and solidarity in the face of COVID-19: local responses, global responses". Alassane Guisse, deputy mayor in charge of international cooperation and solidarity, took part on behalf of the city of Nantes, together with the mayor of Dschang (partner city), who was present by video.

Nantes Creative Generations: young people at the heart of Europe

The Nantes Creative Generations (NCG) initiative launched by Nantes Métropole and the City of Nantes in 2009 aims to improve Nantes' visibility at European level and make Europe a reality of everyday life in Nantes, creating opportunities for young people from Nantes.

Cancelled due to the health crisis, the annual forum, NCG on Tour and the cooperation award have been postponed.

Europe in Nantes: fertile ground for associations

Based on the belief that Europe should be an opportunity that people experience for themselves, Nantes Métropole supports local associations that raise awareness of Europe and its challenges. The city supports associations that run a range of exchange schemes between citizens in Nantes and their counterparts across Europe, such as:

- La Maison de l'Europe, which informs citizens and raises their awareness of European issues, also guides local project owners and helps them give their projects a European reach;
- Euradionantes, a European radio/school that continues to improve access to European news and the issues it faces, while raising the profile and influence of Nantes Métropole in Europe. Although the station's development slowed down in the context of COVID-19, this did not prevent it from broadcasting to new cities: Paris, Marseille, Bordeaux, Toulouse, Nice. In 2021-2022, four more cities will be added: Tours, Orléans, Rennes and Angers;

- The European Cultural Centre and its binational cultural centres (Franco-German, Franco-Spanish, Franco-British and Franco-Italian), which are tasked with raising the visibility of the various European cultures in the conurbation;
- Graine d'Europe, Gare de l'Est...

Europa Nantes celebrated its first year of existence in 2020. Europa Nantes, located along the Boulevard de la Prairie aux Ducs, is a new 1,000 m² space designed to strengthen the links between the people of Nantes and Europe. Bringing together the main European associations of the local area, on a site which is open to the general public, Europa Nantes is dedicated to education, experimentation and the creation of projects with a European dimension. Europa Nantes is managed by the Maison de l'Europe.

Despite the health crisis, Europa Nantes has asserted itself as a resource centre on European issues by multiplying its initiatives, mainly online (debates, conferences, meetings), and by continuing its mission to inform and raise awareness on European issues.

INTERNATIONAL COOPERATION

With the goal of working towards the global challenges defined in the UN's Sustainable Development Goals, Nantes Métropole both leads and supports cooperative international actions that are based on complementarity.

In addition to this, Nantes Métropole and its partner local authorities have also made it a priority to improve services to residents and ensure their sustainability.

Initiatives by Nantes Métropole and its partners in Africa and Haiti

- **Coherence of activity since 2012**

Nantes Métropole continued its North-South and South-South cooperation with three partner local authorities: Dschang (Cameroon), AMAGA (Association des Maires de la Grand' Anse en Haïti) and Kindia (Guinea). It is a question of structuring communal or inter-communal services capable of satisfying essential urban needs and developing them in a sustainable manner in consultation with the inhabitants. The exchange of experiences between the four local areas is a major asset. Inter-municipal organisation, access to drinking water and sanitation, waste management, promotion of local and organic agriculture and the production of hydroelectric power are all areas in which projects are developed in collaboration between local areas (with the financial support of partners such as the French Development Agency, the Ministry of Europe and Foreign Affairs, and the International Association of Francophone Mayors).

This approach is yielding results: For example, Dschang now has a water and energy agency that maintains and develops the commune's water and electricity infrastructure. It also relies on its municipal waste management agency to collect and sort household waste, and to produce and sell the compost it produces. Its approach is in the process of becoming inter-municipal. Kindia is defining and financing its strategy for access to drinking water, in conjunction with the national association of communes in Guinea, to contribute to a national development.

- **Enforcement of the water act and actions to address other urban issues**

Water and sewerage are priority sectors in international development aid. Since 2005, local authorities in France have been able to draw on specific funds, up to a limit of 1% of the public water and sanitation services' resources (for Nantes Métropole, the upper limit is 0.5% of water and sanitation budgets). In 2020, Nantes Métropole maintained its support (started in 2017) for projects from other municipalities in the metropolitan area: waste management, prevention of natural risks, combatting climate change and the resilience of cities.

The objectives are, on the one hand, to strengthen cooperation between the municipalities of Nantes Métropole and their partner cities, in order to improve access to drinking water and sanitation services for their inhabitants, and on the other hand, to respond to humanitarian emergencies linked to natural disasters.

In 2020, Nantes Métropole supported the EduKindia project (led by Orvault, Bouaye, Basse-Goulaine, Saint-Jean-de-Boiseau, Sainte-Luce-sur-Loire and coordinated by the NGO Guinée 44) as well as cooperation between Carquefou and Matéri (Benin), Bouguenais, Rezé, Saint-Herblain and Yene, Ronkh and Ndiagianiao (Senegal) respectively.

Furthermore, following sustained exchanges with Kindia, Dschang and AMAGA, in the framework of emergency aid, it contributed to helping these territories in the fight against the COVID-19 epidemic.

- **Supporting the energy transition and the sustainable city**

The City of Dschang, Électriciens Sans Frontières and Nantes Métropole devised a project in 2016 to roll out Dschang's municipal policy on renewable energy. It consists of equipping the city with micro hydropower plants and managing a public service to produce and sell clean, affordable and reliable

energy. It will all also involve setting up a municipal department responsible for managing the service.

This project was completed in 2019 by a second co-financing from the French Development Agency (AFD) allowing the opening of a second phase of the hydroelectric power project (construction of a 3rd power station) and the addition of a waste programme providing for the deployment of an individual and municipal composting service in Dschang and in the Menoua department. The latter also aims to mobilise the inhabitants of the various communities concerned. AFD is providing substantial support to these two projects (€1.338 million out of a total budget of €1.927 million, the rest being shared between partners).

The reliability of the management of these services is encouraging other partners to develop projects with Dschang: the Cameroonian government, the European Union and Italian and Swiss organizations. Similarly, in Guinea, the European Union has extended its waste management improvement programme to Kindia, which has a water and sanitation agency

- **Support from Nantes Métropole for local governance**

Faced with the current social, economic and ecological challenges, the role of cities and towns is important: they must ensure that many public services meet the needs of their inhabitants and ensure their sustainability. Nantes Métropole supports the organisation of elected representatives and municipal services so that they can better make their voices heard concerning national or international projects related to the development of their territory. This is particularly true in Haiti with the Association of Mayors of Grand' Anse where sustainable agricultural development and the fight against deforestation can only succeed with the support of the inhabitants and their local representatives.

Local action by Nantes Métropole

- **Supporting international associations**

In 2020, Nantes Métropole provided financial assistance to three associations that are partners in its cooperation schemes:

- Inti: conducting initiatives to promote solar energy and development in emerging countries;
- Compos'tri: recovery of household waste, provision of methodological and technical support to instil composting as a practice in Kindia and Dschang;
- Électriciens sans Frontières: contribution to the project to roll out micro hydropower plants in Dschang.

TOURISM IN TRANSITION

For a long time, Nantes has had the image of a rather indistinct and unknown city for tourists. Close to the chateaux of the Loire and the Atlantic coast, it has many assets and points of interest, heritage, architecture, history, culture, wine and gastronomy, without being known and recognised for any particular reason.

However, over the last twenty years or so, the sleeping beauty has managed to reinvent itself by taking a different look at the world. Today, it stands out for its creativity, originality and cultural effervescence, making it the "loopiest city in France" according to the Sunday Times. Nantes has thus managed to build the identity of a city that is offbeat, criss-crossed by art, but also of a serene city where life flows smoothly.

By building this very special image, Nantes has managed to find its place among other tourist destinations, as a city that is ambitious but not pretentious, a city that is extravagant but not overwhelming

With the health crisis, as in all destinations, the tourism sector has been heavily impacted, while at the same time demonstrating its ability to bounce back.

Leisure tourism: slower growth but resilient in the face of the crisis

In the space of 20 years, Nantes Métropole has become one of the most vibrant and inventive conurbations in France. A large number of sites, creations, events and activities usually take place throughout the year, some of which are of international importance: Le Voyage à Nantes, La Folle Journée (a classical music festival), Estuaire (a permanent open-air collection of contemporary art between Nantes and Saint-Nazaire), the mechanised animals and monsters of the Machines de l'Île, the Castle of the Dukes of Brittany and many more.

In 2020, in the city as elsewhere, the tourism sector was particularly affected by the global COVID-19 pandemic. This context notably caused a freeze in tourist flows and the activity of business or leisure groups, a clear drop in the activity of individual customers, the collapse of foreign customers, or the cancellation of almost all festive times and events.

Nevertheless, summer activity was maintained, partly thanks to the programming of one of the main summer events (the Voyage à Nantes, shifted to August and September) and the opening of important sites for visits (castle, Machines de l'Île, Art Museum, etc.). In addition, there is a permanent offering for tourists with the "Voyage Permanent", the "Parcours Estuaire", the "Voyage dans le Vignoble", and the "Traversée Moderne d'un Vieux Pays", which is relevant and resilient in times of crisis.

In 2020, we also note the following highlights:

- The enhancement of the Voyage to Nantes with permanent installations. Examples include Lilian Bourgeat's "Invendus", Evor's "Psellion de l'île" installation, Martine Feipel & Jean Bechameil's "Les Brutalistes", Mrzyk & Moriceau's "Nantes ici Nantes", Nathalie Talec's "In a silent way", not to mention Eric Croes's new "Le Géant" sign on the Saint-Junien Falbalas hat shop. It is also worth noting the inauguration during the summer of the "Station Nuage" in Saint-Sébastien-sur-Loire, and in the autumn of the "Porte-Vue" in Château-Thébaud on the "Voyage dans le Vignoble" route;
- the 9th edition of the summer event "Voyage à Nantes", shifted by one month between 8 August and 27 September, marked by the monumental work "Rideau" by Stéphane Thidet on the façade of the Graslin theatre. We should also mention the organisation of a "Nuit du VAN" and a "Nuit des Tables de Nantes" on the same weekend at the end of the event (in a reduced format for health reasons), both of which were well attended;
- The installation of the "Parade Amoureuse des oiseaux de paradis" (Loving parade of birds of paradise) in the Galerie des Machines, based on the artistic universe of the Arbre aux hérons (Heron Tree), which was a vector of attraction for the Machines de l'Île site. More than 323,000 people visited in 2020, despite the long closure periods and reduced capacity;

- A reinforced tourism promotion campaign around Lake Grand-Lieu, in partnership with the department, the 10 riverside municipalities and their inter-municipal organisations;
- Support for 13 municipalities to assist the operation of 15 local tourism sites, for a total budget of almost €160,000;
- The continuation of initial studies for the Heron Tree and the start of construction on the first elements of the bestiary, such as the Cameleon and the first Great Blue Heron;
- The year 2020 will nevertheless be marked by the cancellation of major events that usually punctuate the cultural and tourist life of Nantes: the Folle Journée, the cultural programmes of Nefs, etc.

Despite all these actions in favour of maintaining tourist activity in the Nantes metropolitan area, tourist numbers, which have been growing steadily since 2010, have been greatly slowed down due to the state of health emergency (reduction in gatherings and travel), and even paralysed during the lockdown (March to June, then November to December). The following should be noted:

- 1,800,000 overnight stays in market accommodation (source: tourist tax and Airbnb), 43% less than in 2019;
- Drop in visitor numbers ranging from -26% in August for the best month (-33% in July and -32% in September) to -80% in April (full lockdown);
- An 80% drop in international visitor numbers, but a significant increase in Parisian customers +20%;
- A limited drop in the number of tourists visiting the city of Nantes: a 30% decrease in the number of overnight stays during the summer months, a 23% decrease in the number of visitors in July and August to the Machines de l'Île (with a 30% decrease in the number of visitors), a 5% decrease in the number of visitors to the castle's museographic areas and an 18% increase in the castle's outdoor courtyard.

In 2020, Nantes Métropole, thanks in particular to the "Voyage à Nantes ", proved its capacity to adapt. Today, Nantes Métropole is a recognised destination for urban tourism, but also for its art and culture at national, European and international level. In times of crisis, the strategic choice in recent years to expand the collection of permanent artworks and installations accessible to all in the public space (for example, on the Green Line route) has proven its relevance.

Business tourism, strongly impacted by the health crisis

The business meetings and events industry (organising seminars, study tours, conferences and other shows) generates significant economic benefits for all tourism stakeholders and in particular hoteliers.

For several years, the main venues in Nantes have played a key role in developing the MICE (Meetings, Incentive, Conferences, Exhibitions) contract. According to calculations by France Congrès, Nantes' Cité des Congrès and exhibition centre generate €259 million in annual benefits for the local area.

In this respect, the professional meetings sector contributes to the influence of the local area by promoting the destination to business tourists, some of whom are likely to return as leisure tourists.

This sector has of course been heavily impacted by the health crisis, with large gatherings having been cancelled.

Key figures for business tourism in 2020

- **Cité des Congrès:** 67 MICE events, 4 international, 9 national and 54 regional events, some 30 cultural performances.
- **Parc des Expositions exhibition centre:** 35 events hosted, including 4 product events and 11 competitions for an audience of 79,085 people (600,000 in 2019).

In 2020, the Convention Bureau run by Nantes Saint-Nazaire Développement strengthened its positioning as the authority responsible for the Region's promotion and economic and international development. Event organisers can make use of the Bureau to perform thematic searches of hotels,

sites for private hire, caterers, event agencies, service providers, restaurants, etc. The Bureau runs the MICE club jointly with the Nantes Saint-Nazaire Chamber of Commerce and Industry. The club brings together the various players in professional and sporting events in partnership with the tourism board and major sporting facilities. Its objective is to enhance the visibility of what the local area has to offer in terms of professional event facilities. The club is also tasked with promoting the area's range of sporting activities at national and international level and already has 80 members.

In 2020, the Convention Bureau set up a health charter to reassure tourists that health measures are in place when they come to the area.

In addition, Nantes Métropole supports the development of its local area's sectors of excellence by supporting economic, tourist and scientific events with national and international influence. In 2020, due to the health crisis, only 8 events could be supported (six in the ECO & ESR domains, and two, at the University of Nantes, within the framework of the "Campus Nantes" Convention), compared to 45 in 2019. One of these events, "Start West 2020", took place at the Cité des Congrès in Nantes.

Heavily impacted in 2020 but resilient, tourism continues to adapt to the health crisis by strengthening two existing areas of work: local tourism and sustainable tourism. Thus, Nantes is recognized as a sustainable destination, notably through 3 labels: GDS Index (dedicated to business tourism), Cit'ergies (for which tourism will be one of the major subjects to reach the Gold level), and Sustainable Innovative Destination (for which Nantes is one of the 9 pilot cities).

AN INNOVATION-ORIENTED CULTURAL POLICY

Nantes Métropole's aim is to underpin a bold ambition with a cultural policy that plays a central role in building community spirit and developing the local area. This approach is based on an exacting vision of culture as a means of individual and collective empowerment and as a free space in which a society can reinvent itself through interaction.

By sharing with a broad audience and making room for innovative ideas from near or far, a particular focus is placed on the capacity for innovation and diversity, whether that be in the way culture is experienced, in creative process or in cultural projects.

The year 2020 will have been marked by the health crisis affecting the cultural offer of the facilities managed by the administration. However, during this period, Nantes Métropole has maintained and reaffirmed its ambition in terms of culture with a diversified offer accessible to the greatest number.

Communication of digital cultural offers during the closure of cultural venues (from mid-March to June and November to December 2020)

Due to the closure of cultural and social venues, the City of Nantes wished to relay, during the two lockdowns, **via its social networks and its website**, the numerous digital cultural proposals that emerged spontaneously in the local area.

With podcasts, videos, recordings of conferences, concerts, stories, performances, radio programmes, creative activities, webzines, clips, reports, databases, virtual tours, and more, the cultural community has overflowed with imagination to put cultural resources online, to the great delight of the people of Nantes, many of whom have connected to it:

- "Going out" section: "**What to do in Nantes when lockdown lifts**", with a weekly publication (on Wednesdays) of five or six new proposals <https://metropole.nantes.fr/qfan> ;
- the "**culture at a distance**" section lists all the permanent cultural content available to the people of Nantes <https://metropole.nantes.fr/culture-distance> ;
- "**Nantes Inspiring**" gives a voice to the men and women of the region who continue to think, act and invent, in a podcast broadcast on Tuesdays and Fridays <https://metropole.nantes.fr/podcasts>.

A dynamic of attendance and cultural offers for metropolitan facilities

- At the **Castle of the Dukes of Brittany and its Nantes history museum**, the year 2020 was marked by the closure of the establishment for 5 months, the application of attendance gauges reducing the volume of visitors and the constant adaptation of the cultural schedule. **844,340** people visited the Castle, compared to 1,203,405 visitors in 2019. In 2020, it was also decided to postpone the international exhibition "Genghis Khan" following the intervention of the Chinese authorities to modify its content. The exhibition LU, a century of innovation (1846-1957), proved very popular with the museum's visitors, who totalled **158,914** for the year 2020 (379,433 for 2019).
- The **memorial to the abolition of slavery** welcomed **114,233** people (221,083 visitors in 2019). The **Cathedral crypts** had **536** visitors (36,229 visitors in 2019). This low figure is linked to COVID-19 (closing as early as March) and the cathedral fire on 18 July 2020, when the crypts were due to reopen in early August.
- At the **Chronographe**, there were **10,461** visitors in 2020 (23,600 visitors in 2019), with attendance very close to the level of previous years during the opening periods. The observation of a family and school audience is confirmed for this establishment which has made it its target audience.

Cultural partnerships continued with:

- the **Archéolabo** exhibition , which promoted archaeological research and its current status in Nantes Métropole ;
- the **Néandertal** exhibition, opened in August 2020 in close partnership with the Natural History Museum in Nantes and the Musée de l'Homme in Paris.

- **In terms of metropolitan competencies related to heritage, the activities of the archaeology department** are divided between advice and expertise for project owners in charge of development in the metropolitan area and the carrying out of operations prescribed by the State. The main projects carried out in 2020 concern assessments carried out in the municipalities of Bouaye, Bouguenais, La Chapelle-sur-Erdre, Nantes, Mauves-sur-Loire, Rezé and Saint-Herblain. The operations carried out in these different municipalities, where the archaeological map was sometimes devoid of any remains, contribute to better documenting the history of land occupation in these local areas, which are mostly in the process of being urbanised. Furthermore, in 2020, the highlight was the first excavation operation carried out by the department on a site from the **Gallic** period. This is the site of La Louëtrie, in the Doulon district of Nantes, and the discovery of a vast property inside which were preserved the remains of several houses built in organic materials (wood and earth). This ensemble attests to domestic and probably also artisanal activities.
- With regard to **the coordination of the document management and archive function** of the pooling plan, the year 2020 was marked by the intervention of the joint Nantes Archives service with the 24 member municipalities. During working groups, the services collaborate on subjects related to data structuring but also by ensuring the follow-up of archiving procedures for 7 municipalities out of 24. In addition, in 2020, the project for a shared electronic archiving system, which is about to be opened up to the municipalities, has reached the study and programming phase.
- The **Musée d'arts** also proposed **18 new specific actions** during the lockdown. For example, the **#Tussenkunstenquarantaine!** challenge, which received **117 entries**, consisted of using a work of art in the museum as the basis for a personal photo that recomposed the work. Consultation of the Museum's online collection of works has increased from **2,500 monthly sessions to 9,000 monthly sessions (3.6 times more than before the lockdown)**.

One of the entries was even noticed by the CLIC, since the interpretation of "L'Esclave blanche" by Lecomte du Nouÿ won the **CLIC France prize** for the national challenge "Art en quarantaine": <http://www.club-innovation-culture.fr/concours-national-artenquarantaine-gagnants/>.

- At the **Natural History Museum**, the closure due to the health crisis and a period of work deprived the establishment of public for seven months, from March to August and from the end of October to December. Several initiatives were carried out by the museum's team of mediators during the year of the pandemic, to maintain contact with the public and in particular with isolated people.

In April 2020, the mediator responsible for people with disabilities initiated "scientific readings by telephone" for visually impaired people. Nearly 130 readings were given during the first lockdown, mostly to people aged between 60 and 90. The Nantes planetarium and the Espace des Sciences in Rennes have joined the museum's approach. An authorisation for a cultural exception to copyright has made it possible to ensure the long-term survival of the system.

A **video with "live" French sign language translation** (possibility of questions for those connected) was tested in partnership with the "Culture LSF" association. Very good feedback has led to the continuation of this original production; a partnership with the art museum is being set up.

The museum also participated in the distribution of 250 solidarity baskets distributed by the CCAS and socio-cultural centres in Nantes' districts. Still with the aim of reducing the isolation of vulnerable people, activities were organised in the City of Nantes' old people's homes.

In August 2020, a **new reception area for the public was opened**. More ergonomically designed for the staff, this space also provides a more comfortable welcome for the public, in an aesthetic that foreshadows the future museum.

- **The Planetarium continued to innovate and strengthen its digital profile.** After a reduced first quarter (11,289 visitors), it had to close its doors for the rest of the year. Classified as a category L "projection room", it could have reopened in July, but the cramped conditions of the premises (for both the audience and the staff) meant that it was not possible to open it with the required distance. In addition, the ventilation system that had been in place for many years did not meet the recommendations for reopening theatres.

Based on this observation, the team began working together to offer a complete range of services to users without having to welcome them to the premises. The Virtual Planetarium was launched. After several months of work, a provisional website, a Facebook page and a YouTube channel were fully set up. The programme for the summer of 2020 includes a video every Friday "In the sky this weekend" to learn how to easily observe a small corner of the sky, and an "astro challenge" every Wednesday for children and families to tinker with or make an object related to astronomy. A lot of work has also been done to make available to all (leisure centres, individuals, etc.) more than fifty ready-to-use educational resources. The participation in the VAN was maintained with the online publication of a reworked creation (a flat format such as a classic screen and a 360° version for virtual reality headset users).

The digital skills of the whole team made it possible to offer users an experience that proved popular: **21 YouTube videos (6311 views overall) and 1,300 new Facebook subscribers**. The summer was also an opportunity to test the webinars aimed at leisure centres and the general public. These webinars took off in the second half of the year. A programme of live and online sessions (39 webinars: every Wednesday, one weekend a month, every day of the school holidays) enabled 3,632 people to keep in touch with the Planetarium.

September and October were devoted to the **renovation** of the Planetarium's auditorium. Planned for more than a year, they will greatly improve the reception of the public. An increase in the capacity to 59 seats will make it possible to accommodate more visitors and 2 classes simultaneously. In addition, the organisation of the premises will make it possible to limit the inconvenience caused when entering or leaving during a session and to follow a circuit without crossing the public during entry and exit.

In addition, the **"off-site" offer** has been launched. As the pupils could not go to the Planetarium, mediators went to 34 classes. **790 pupils** were able to **benefit from an activity**. This offer and the webinars (groups and public) will continue in 2021 until the reopening of the Planetarium announced in June, on the occasion of its 40th anniversary.

- The year 2020 will also have allowed us to start some fundamental work and the development of alternative offers: websites, new sessions, educational resources for teachers, partnerships...).

Installation au long cours de Royal de Luxe dans le quartier du Grand Bellevue

The establishment of the "Royal de Luxe" company in a political district of the city. Installed in Bellevue at the end of 2018 in collaboration with an urban renewal programme, "Royal de Deluxe" is the result of a desire to open a new chapter in the dialogue between culture and public spaces. A first in France and planned over several years, the project combines artistic performances and the creation of permanent pieces. It is firmly focussed on the general public and the relationship that residents have with their neighbourhood; The health crisis has had a major impact on the implementation of the Grand Bellevue project in 2020.

Royal de Luxe was able to realize the imaginary situation entitled **"Fiat 500 blackboard"**. It was a nod to the blackboard in the classrooms of yesteryear. This Fiat was installed, in turn for a week, in the courtyards of 7 nursery and elementary schools in Bellevue (4 in Nantes and 3 in Saint-Herblain).

The second imaginary situation was called **"Cinemascope"**. It consisted in gradually revealing the strange intimacy of the life of the inhabitants of an apartment in a building at 2 rue de la Saône in Nantes. It took place in September 2020.

The third imaginary situation entitled "Mr Burgundy's winter holidays" was not carried out in November because of the health crisis. It is postponed to November 2021.

The "Imaginary City", an ambitious project

After six months of consultation and collaborative work to imagine **the future of the Cap 44 building** (the great mills of the Loire in Bas Chantenay), the decision was made in October 2018 to preserve and transform the site while respecting its history. The goal is to reveal the aesthetic and heritage value of the building (currently hidden by cladding installed in the 1970s) through 6 key intentions:

- maintain a high point to the west to offer a new panorama;
- lower the eastern section to encourage the discovery of the landscape and the brightness of the site while creating a real link between the Loire and its environment;
- open up the ground floor to allow views between the Loire River and the quarry;
- reveal the historical construction method "Hennebique", the only of its kind used in the world when the building was constructed in 1895, and a witness to Nantes' industrial, port, maritime and river history.
- give particular importance to the theme of the imagination (Jules Verne being one of its most illustrious representatives), in interaction with the forthcoming Heron Tree and its Extraordinary Garden;
- create a one-of-a-kind place on a metropolitan scale along the Belvédères route.

In order to fine-tune these intentions, a conceptual design study was carried out by the Directorates-General for Culture and delegated to Territorial Consistency Scheme.

It is planned to use the building for a **cultural and cultural and tourist offer centred on Jules Verne and his worlds** in a specific place. In keeping with the figure of the writer, the aim is to transport its visitors into more contemporary imaginations and create a symbiosis with the Extraordinary Garden and the Heron Trees to make it a coherent cultural and tourist ecosystem.

The concept envisions several playful, immersive devices and programming in which each event (exhibition, meeting, festival of ideas, etc.) opens up a new dream or a new imagination, challenges visitors and questions our uses.

There will be a strong emphasis on multidisciplinary, experimental approaches and forward-looking or utopian visions. Creators hosted in residence will contribute to the programming of the site and the dynamics of the local area.

As part of the project, the following spaces are planned:

- a permanent exhibition space to replace the current Jules Verne Museum on the **"Hennebique" plateau**. Consistent with the building's concept, this location is intended to bridge the gap between the universal fame of Jules Verne and the limited resources currently devoted to his tribute. A complete and innovative offer ("from writing to images and imagination") is planned, meeting the expectations of different audiences;
- a **temporary exhibition space**, offering a programme (on the bases outlined above) in conjunction with les Utopiales, the Lieu Unique, the CSTI Cluster (Scientific, Technical and Industrial Culture) and other partners;
- a **"third place"-type library** dedicated to the theme of the imaginary and encouraging the involvement of users;
- a **performance space**, operated in affiliation with the exhibition spaces and the library.

In addition to the universally accessible panoramic terrace, there are also plans for a restaurant area and a shop.

This place will be aimed at **people of all ages** who have come to discover or help others discover the universe of Jules Verne and his imaginary worlds. A specific programme will be offered to school audiences.

Angers Nantes Opéra: an opera in the public space!

Angers Nantes Opéra (ANO) is a key player in the conurbation and the Region, a driving factor in the cultural influence and appeal of the Nantes metropolitan area.

In 2020, the health crisis linked to COVID-19 had a strong impact on the cultural sector. The Graslin theatre was closed to the public (cancellations and/or postponements of performances later in the season or in future seasons). Angers Nantes Opéra has supported all its employees, the artistic team and the technical team, by setting up solidarity and support actions. The ANO continued to offer content and actions (recording of the Fête de la musique, the web series "Iphigénie à l'Opéra", the tutorial "ça va mieux en le chantant", maintaining cultural actions) and to host professional projects and rehearsals (Orchestre des Pays de la Loire, Opera on the Rocks, etc.).

This dynamic is typical of the new artistic and cultural project currently being led by this institution, whose aim is to reach a wider audience, primarily by bringing opera to the heart of the public domain.

Angers Nantes Opéra helps to spread the influence of Opera through its performances and cultural projects, particularly in the field of art education. It reaches an audience from all the municipalities in Nantes (around 1 in 3) and the wider region.

The association "Opéra en Grand Ouest", created jointly by Nantes Métropole and the cities of Angers and Rennes to share opera programming between the two opera houses, was created in 2019. Under this cooperative scheme, Angers Nantes Opéra and Opéra de Rennes will continue to work together through joint opera programming, as they have done since the 2018-2019 season (6 productions of joint shows planned for the 2019-2020 season).

The ANO also maintains an openness to other disciplines, especially dance, through its involvement in the "Trajectories" festival, but also cinema with the hosting of the Spanish Film Festival and the 3 Continents Festival. This openness is continuing and will continue to be directed towards all audiences by consolidating the actions undertaken (welcoming families and schoolchildren on the occasion of participative concerts, "ça va mieux en le chantant", for example).

Key figures in 2020

In the context of a health crisis involving several weeks of closure, the metropolitan cultural facilities hosted:

- **Nantes History Museum (at the château): 158,914 visitors** including permanent and temporary exhibitions and artistic programming.
- **Musée d'Arts: 133,577 visitors** visited the Museum despite being closed from 16 March to 22 June and from 30 October to 6 November 2020.
- **Natural History Museum: 58,202 visitors** to the Museum during the 132 days it was open to the public (from 1 January to 14 March and from 8 August to 29 October). Daily attendance is 441 visitors (466 in 2018, 409 in 2019).
- **Planetarium: 11,289 spectators** from January to March, 790 students/children in "off-site" activities and 3,632 people connected to the online activities (the establishment has been closed since mid-March for sanitary reasons and work). Concerning social networks: 21 YouTube videos: 6,311 views and 1,300 new Facebook subscribers.
- **Chronographe (archaeological interpretation centre): 10,461 visitors** despite being closed from 16 March to 22 June and from 30 October to 6 November 2020.
- **Jules Verne Museum: 16,636 visitors** (monthly average of 2,559 visitors and daily average of 100 visitors during open periods, a decrease of 28% from 2019).
- **114,233 visitors to the Memorial of the Abolition of Slavery** and **536** to the Cathedral crypts, closed to the public from 18 July 2020 following the fire.

SUPPORTING ELITE SPORT

Elite sport is an essential factor behind the appeal of the local area. With this in mind, Nantes Métropole manages the local area's sports facilities, supports clubs and high-level sportsmen and women, and contributes to the organisation of sports events on a metropolitan scale.

Promoting and developing the sporting elite

In 2020, professional sport in Nantes Métropole, an almost unique landscape in France, continued to bring together many large-scale clubs. 7 professional teams were supported: Football Club de Nantes, Nantes Rezé Basket (women's basketball), Nantes Basket Hermine (men's basketball), HBC Nantes (men's handball), Nantes Atlantique Handball (women's handball), Volley Ball Nantes (women's volleyball) and Nantes-Rezé Métropole Volley (men's volleyball). Apart from Nantes Basket Hermine, all these clubs are playing at the highest national level. Four of them even play in the European Cup: on the one hand, HBC Nantes and Volley Ball Nantes in the Champions League, and on the other hand, Nantes Atlantique Handball and Nantes Rezé Métropole Volley in the EHF Cup and CEV Cup.

Alongside these clubs, Nantes boasts two "amateur" clubs with a strong local identity competing at the highest levels of their disciplines, namely Nantes Métropole futsal and Nantes Métropole Athlétisme.

Of course, the year 2020, which is unique due to the health context, has led to an early end to all sports competitions in March. In addition to the sporting situation, the crisis has had significant financial consequences for the clubs, with the 2020/2021 season taking place almost entirely behind closed doors (impact on ticket sales, partnerships, etc.). To date, the impact cannot be precisely quantified. In addition, the sudden drop of almost 50% in TV rights, a major budgetary component, should be noted for FCN.

Nantes Métropole supports professional sport through the allocation of subsidies and the purchase of communication services, for a total amount of €5.5 million. It also provides specific support for elite athletes (25 elite athletes as at 1 November 2020). These sportspeople, who feature on the register of elite and senior sportspeople drawn up by the French Ministry of Sport, represent France at international competitions in around 12 disciplines. The support provided (€75,000) was used to purchase specific equipment or international travel.

Some of these athletes had the ambition to qualify for the Tokyo Olympics, which were initially scheduled to take place in 2020... This global event has been postponed to the summer of 2021.

Sporting facilities in Nantes Métropole

Due to the health situation, many events that were to be held in the metropolitan sports facilities were cancelled or postponed. In fact, the use of such equipment is down 40% from 2019.

The Beaulieu Sports Centre (PSB)

Built in 1973 and still the largest covered sports facility in Nantes, the Beaulieu sports centre is currently undergoing major work. Since spring 2016, the complex has been undergoing rehabilitation and modernization works, organized over 4 years. In addition to a building upgrade, user facilities have been improved with new entrances, boxes, a reception area, a shop, and additional ticket offices and toilets. A drug-testing room, a recovery room and a physical preparation room have also been added. The capacity of the main room ("Salle 5000") has been increased from 4,700 to 5,400 seats.

In December 2020, the specialist rooms (judo/aikido, karate/taekwondo, gymnastics, boxing and weight training/weightlifting) were completed, thus concluding the programme of work on the building. Their reopening will offer users improved conditions for practising sports: increased surface area, dedicated changing rooms, thermal and acoustic comfort, new association and storage rooms.

In spite of the health context, the HBCN was able to play 16 national championship and European Cup matches. A boxing gala hosting heavyweight Tony Yoka was also able to take place at the PSB, behind closed doors but in front of the Canal+ cameras.

The Pierre Quinon Stadium

This specialised structure, with a 200m oval, a central track, jumping areas and 18 badminton courts, hosts numerous athletics events: French championships, Pre-France and French Masters athletics championships. Two meetings, 4 regional championships and one departmental championship also took place. The "non-athletics" events usually hosted after the athletic season could not be held due to the health situation.

The Trocardière Metropolitan Sports Hall

This sports hall specialising in basketball hosted meets by Nantes Rezé Basket (women's club) and Nantes Basket Hermine (men's club). A Nantes Rezé Métropole Volleyball match also attracted more than 4,000 spectators .

The Petit Port Ice Rink

The only ice rink in the department, the skating rink forms part of the Petit Port sports complex and welcomes a diverse audience, including associations, schools and the general public. This is where the Nantes Corsaires, who play in the D1, usually sell out their matches.

In 2020, circumstances led to its closure from mid-March to the beginning of July, then from the end of October. Its attendance, which was over 100,000 admissions in 2019, thus fell to 56,233 admissions in 2020.

Supporting major sporting events

The events sector was very much affected by the health context, which naturally prevented the holding of many sporting events (Marathon, Sprinters' Trophy, European boxing gala and other XXL events). However, the following events will be hosted in an adapted format:

- the ODYSSEA walking race in March;
- the FRANCE 2023 Rugby Train at Nantes station in October;
- the French 3X3 Basketball Open in July at the Parc des Chantiers.

DEVELOPING HIGHER EDUCATION AND RESEARCH

Higher education and research, the cornerstone of any city with a focus on learning, have been the driving factor behind a host of local innovations, in sectors such as health, materials and human sciences. By supporting the Université de Nantes, higher education institutions and research centres in the region, Nantes Métropole plays an active role in harnessing local expertise and extending its influence at European and international level.

Campus Nantes: 5 sites registered

Following the approval of Campus Nantes' strategic priorities in June 2013, all the academic, institutional and business partners involved have been taking part in site committee meetings, addressing overall issues such as site development, the road system and services, along with issues more specific to the establishments and students (housing and catering arrangements, timetables, etc.).

Of the five sites registered with Campus Nantes, committees are in place for:

The La Géraudière, Tertre Lombarderie, City Centre/Île de Nantes and Chantrerie-Fleuriaye sites. For the IRT Bouguenais site, committee meetings will be held as the Zones d' Aménagement Concerté (Comprehensive Development Zones) are planned and approved.

During the year 2020, the health crisis did not allow these site commissions to be held, as the higher education and research establishments were busy organising distance learning courses.

Campus Nantes: the continuation of site agreements

Site agreements are one of the tools implemented as part of the Campus Nantes initiative set up by Nantes Métropole. Signed for a three-year term, they are designed to establish contractual relationships with virtually all of the higher education and research institutions in the Nantes conurbation. They define, pursue and step up Nantes Métropole's support by financing initiatives in strategic areas based on the common priorities set out by Campus Nantes.

Site agreements also provide information on all of the funding provided by Nantes Métropole to each institution regardless of the contractual arrangements and public policies concerned. 3-year site agreements were signed with the university, Audencia and the Nantes Atlantique School of Design. In 2020, a new agreement was to be concluded with the École Centrale, which was finally postponed in view of the evolution of the NExT (Nantes Excellence Trajectory) file and the New University of Nantes (NUN). The year 2020 also sees the end of the three-year Campus Nantes agreement with the University, worth €1,550,000 per year, which must be renewed for the period 2021/2023.

It is worth noting that health is one of the main fields of research excellence in the Nantes metropolitan area. It benefits from a close partnership between basic and clinical research, but also between hospitals and patients. Under the planning agreement between the national and regional governments (CPER), Nantes Métropole is associated with the pre-operational studies conducted by the region concerning the higher education component of the future Faculty of Health on the Ile de Nantes (excluding L1).

Concerning the Gloriette site, Nantes Métropole is the project manager for the BIAS operation, which will host the L1 Health courses and the central services of the University of Nantes. This €15 million operation is financed by Nantes Métropole (€8 million), the Region (€5 million) and the University (€2 million). Launched in June 2020, the construction site will be delivered for the start of the 2022 school year. At the end of this operation, the Gloriette site will be completed and will accommodate students in their first year of health studies as well as the Pharmacy Department and the Health BU.

Higher education in the metropolitan area and the NExT project

In 2020, after the difficulties of 2019, the NExT project has been rebuilt on new foundations. This led to a change in the governance of the University and the École Centrale de Nantes, with the appointment of a new director to lead the NExT operational team.

Negotiations between the founding members of NExT (University, École Centrale, CHU and INSERM) have resumed throughout 2020 and should lead to the approval of the new NUN statutes in 2021 and the confirmation of NExT by the international jury.

The scope of the NUN has expanded with the inclusion of the following institutions: Ecole des Beaux Arts Nantes Saint-Nazaire, Ecole d'Architecture de Nantes, IRT Jules Verne.

For its part, Nantes Métropole has maintained its commitments under the NExT agreement between the University of Nantes and the National Research Agency in 2018. Nantes Métropole is supporting the university under the Campus Nantes agreement, which was renewed in 2018 with specific additional funding of €800,000, bringing its total support to €1.1 million. These funds are used to attract new talent and implement tools to develop innovation.

In order to take into account developments in the NUN and NExT dossier, Nantes Métropole has negotiated an amendment to the NExT funding agreement with the University, which will take effect in the first quarter of 2021 and which redirects the funding of the actions, taking into account changes in State funding.

Facility projects that are developing

The year 2020 saw the continuation of studies and work related to various projects:

- Studies related to the construction of the new Faculty of Health on the Île de Nantes are currently being carried out under the project management of the Region but with equal funding from the State, the region and Nantes Métropole. In addition to monitoring the pre-programming of this facility, Nantes Métropole was at the initiative of a student social catering project included in this operation. The project involves accommodating more than 7,000 students as well as the construction of an underground public car park accessible to future users of the site: namely the Healthcare Faculty and the future CHU University Hospital (expected delivery in 2030-2027);
- the Region has approved the pre-programming studies for the new Faculty of Health project (at a cost of €130 million ex. VAT). The funding, which was awarded as part of the Future Contract, includes a contribution of €36 million (excluding VAT) from Nantes Métropole, not including the student restaurant which is valued at €14 million;
- the start of work on the redevelopment of the Erdre university libraries (BU) on the Tertre site (provisional delivery 2021);
- the launch of work related to the transfer of the ENSM, located in the Salorges district of Nantes, to the École Centrale site, for an amount of €11.5 million, with Nantes Métropole contributing €2.5 million under the State's project management.

It should be noted that the management contract for the House of Foreign Researchers has been renewed for the period 2021/2024 with the designation of the Fac Habitat association as the manager of the MCE, which has 24 apartments and facilities for foreign researchers in Nantes.

Additionally, digital equipment and research programmes are ongoing, with funding to continue until 2022 depending on the progress of the various acquisitions by the institutions.

The Research-Training-Innovation initiative

Research-Training-Innovation (RFI) initiatives are designed to support major subject areas as part of an integrated approach. The aim is to boost the area's visibility and appeal through collective strategic thinking to provide a strong stimulus for the three priority areas (Research-Training-Innovation).

Nantes Métropole was asked to finance six of the Research-Training-Innovation initiatives in line with its sectors of excellence (West Atlantic Marine Energy Centre/Energies Marines Renouvelables - WeAMEC/EMR, Alliance Europa, Bioregate, Atlanstic, Food For Tomorrow, Creative and Cultural Industries – CCI).

Financial agreements have been signed for six Research-Training-Innovation initiatives. Four of them are managed by the University of Nantes (Bioregate, Atlanstic 2020, Alliance Europa and Ouest Industries Créatives) as part of Campus Nantes; Food for Tomorrow is managed by ONIRIS and WEAMEC is managed by Centrale Nantes.

Agreements continued in 2020 with 6 RFIs, mainly covering research equipment and demonstrators, communications and international symposia.

The year 2020 marks the end of the financial contracting of the RFIs in their original form. Consideration is being given to the continuation of support for ecosystems and the related roadmaps. The aim is to ensure the necessary coherence with the metropolitan sectors of excellence and to meet the associated innovation challenges.

Supporting the hosting of international researchers ("Connect Talent")

"Connect Talent" is an international call for projects launched by the Pays-de-la-Loire Region in 2013, in partnership with higher education and research institutions and local authorities, with the aim of supporting the hosting of talent, international scientific leaders arriving alone or with a team, in order to give impetus to a new research theme or to accelerate the development of an existing theme.

In 2020, Nantes Métropole continued to support three projects that have been underway since 2017, 2018 and 2017:

- **The UneSEA project** (Marine/Maritime Sciences) **led by Gwenaële Proutière-Maulion**. The aim is to create the first international and interdisciplinary digital university dedicated to distance learning in marine sciences;
- **the "Multimodality Imaging In Cardiovascular Disease" project, led by Romain Capoulade** and hosted by the Institut du Thorax (Inserm UMR 1087 / CNRS UMR 6291), aims to establish a centre of excellence in multimodal translational imaging, with a focus on cardiovascular diseases. This will make it possible to offer comprehensive expertise for analysis and interpretation of imaging data in order to identify the mechanisms involved in the development of cardiovascular diseases.
- **the MILCOM (Multimodal Imaging and Learning for Computational Medicine) project, led by Diana Mateus** at the Nantes Digital Sciences Laboratory (LS2N) (UMR 6004 - Ecole Centrale de Nantes - Université de Nantes – CNRS – Institut Mines Telecom Atlantique). This project, which combines data science and health science focusses specifically on the application of machine learning to the analysis of multimodal medical images, in order to confirm and discover cancer biomarkers. The aim is to enhance diagnostic support for people suffering from more or less advanced stages of cancer.
- **The cEEV (Controlling Extreme Events) project, led by Ioannis Stefanou** at the Civil and Mechanical Engineering Research Institute (GEM) (UMR 6183 - Centrale Nantes - University of Nantes - CNRS). This project will make it possible to develop regional and national skills in numerical simulation. It aims to achieve significant economic benefits by re-examining the basic sciences (fault geophysics, mechanics and dynamics) from an engineering/simulation perspective. The project also aims to protect historical heritage. It should be noted that the project benefits from world-class regional equipment (supercomputers and ultra-fast cameras) and close collaboration with regional experts in simulation and experimentation.

Nantes Métropole has also supported two new projects in 2020:

- **the Plasti-nium project led by Johnny GASPERI**, hosted by the Gustave Eiffel University, a new institution which, since January 1, 2020, has brought together a university (UPEM), a research institute (IFSTTAR), a school of architecture (Év&t, the Nantes National School of Architecture) and three engineering schools (EIVP, ENSG and ESIEE Paris), within the **IFSTTAR Water and Environment Laboratory in Nantes**. Nantes Métropole has awarded a grant of €300,000 for the development of the Plasti-nium project, which aims to study plastic pollution from the urban environment to the receiving environment, i.e. the estuary and the ocean. The aim is to create a cross-cutting and interdisciplinary drive on this issue in the metropolitan and regional area. This project, in close collaboration with the various operational departments of the local authority (water, sanitation, network, waste management), will make it possible to provide evaluation criteria for actions initiated by public policies and other local initiatives to reduce plastic pollution;

- the **"VESTA" project led by Claire Berton-Carabin**, hosted at INRAE Centre Pays de la Loire within the Biopolymers Interactions Assemblies research unit (UR 1268 BIA). Nantes Métropole has allocated a grant of €125,000 for the development of the "VESTA" project (Towards Healthy, Stable and Sustainable Food Emulsions), which aims to anticipate food transitions by making sustainability (healthier and more natural products, plant-based ingredients, more resilient processes, local production systems) the goal to be achieved while ensuring optimal product health quality. This project and the arrival of Claire Berton-Carabin are an opportunity to strengthen the strategic Health/Food sector.

Support for the University of Nantes Foundation as a founding member

The University of Nantes Foundation is currently working to transform and develop the University of Nantes. It supports teacher-researchers' projects to stimulate change in the university and in our society. An effective strategic tool for the promotion and development of the University, the foundation supports projects that respond to the major challenges of the future.

At the end of 2020, the University of Nantes Foundation will have:

- €9.9 million raised.
- 42 active projects;
- 5 teaching and research chairs, including 2 with the UNESCO label;
- more than 350 donors (individuals and companies);
- 13 ambassadors;
- 2 major fundraising campaigns (Humanism2.UN and Heritage2.UN);
- 1 first sheltered foundation (La Fondation Régionale pour le Bénévolat).

Nantes Métropole, a popular partner for international events

The conurbation regularly hosts a number of academic conferences and symposia.

In 2020, in view of the health crisis and mobility constraints, no scientific symposium was held.

ENCOURAGING CREATION, INNOVATION AND THE GROWTH OF DIGITAL TECHNOLOGY

Nantes Métropole aims to feature at the forefront of innovation and digital technology in Europe. Nantes Métropole is thus working to consolidate and develop economic and industrial activities, in connection with the promotion of research, support for innovation structures, support for sectors of excellence (digital, health, cultural and creative industries, environment, advanced production technologies), technological niches and emerging sectors.

As such, Nantes Métropole is continuing in its strategic approach to economic and technological innovation. This approach is based on:

- two priority areas: health and the industry of the future, as well as six fields of excellence in innovation: digital technology, healthcare, cultural and creative industries (ICC), sea, advanced production technologies and agri-food, all of which are underpinned by urban structural projects;
- supporting the creation and development of companies / start-ups by orienting the systems towards a market logic (promotion of research through the "deeptech" section (disruptive innovations), new uses and its interface with companies, student entrepreneurship and academic incubation, development of a metropolitan offer of services for innovative companies);
- optimising the public innovation ecosystem (governance and coordination of support structures - technology parks, competitiveness clusters, SATT, clusters);
- consolidating cohesion in the local area through collaborations and shared strategies (Région, Chamber of Commerce and Industry (CCI), Communauté d'Agglomération de la Région Nazairienne et de l'Estuaire (CARENE), cities, academic institutions, university hospitals, etc.);
- affirming a European (ECI award), supportive and international ambition;
- implementing an appropriate financial strategy (creating new metropolitan approaches with the health innovation fund and the transition fund, etc.).

This approach is consistent with regional guidelines and is linked to that of the State and its ambition in terms of innovation.

Nantes, European Capital of Innovation (ECI)

Nantes Métropole was awarded the European Capital of Innovation prize in 2019 for its ability to develop innovative solutions through a collective approach involving citizens, private players, associations, etc. Nantes Métropole has received a €1 million grant to reward it for its actions and also to initiate new projects.

When it submitted its application, Nantes Métropole made three commitments:

- to support the development of community dialogue in the 24 municipalities of the metropolitan area;
- to develop the Nantes City Lab XXL;
- to organise an event with a European reach in Nantes, with the involvement of various networks such as Eurocities, iKEN, or the 27th region.

The associated health crisis and the postponement of the municipal elections in June did not allow work on the first two commitments to be finalised. It will therefore be continued in 2021.

The third commitment took shape with the organisation of an event on 8 and 9 October 2020: the Nantes Innovation Forum, which was held in a hybrid format between distance and face-to-face with more than 1,200 participants from 23 French cities, 45 European cities and 3 cities outside the EU.

Participants watched lectures with experts and politicians on the theme of innovation in cities and resilience (13 labs proposed). These were working groups aimed at exploring issues at European level, whether on the subject of financing carbon-neutral cities or on innovation in times of crisis. The reports of the labs and conferences as well as the podcasts are available on the event's website: www.nantesinnovationforum.fr.

Digital sector - French Tech Nantes

The Nantes metropolitan area aims to become a major digital centre in Europe by bringing together all the digital players in the area and supporting the French Tech Nantes drive to bring together innovative companies and start-ups.

French Tech Nantes has pursued its roadmap in 2020 around 4 priorities: growing companies, deeptech, skills and diversity/mixity, Tech for Good (positive impact technology).

Highlights in 2020 included:

- extensively mobilising digital ecosystem in Nantes to support the digitalisation of companies and the development of new digital services during the health crisis;
- maintaining new movements in the local area: NaonedIA (collective for ethical, responsible and popular Artificial Intelligence), the PropTech movement (technology and real estate) and technology with positive social/societal and environmental impact (Journées Tech For Good in September 2020 as part of Nantes Digital Week);
- rolling out initiatives such as French Tech Central (connection between startups and public administrations) or French Tech Tremplin (creation of startups for entrepreneurs with a diversity background);
- promoting the retraining and diversity of talent in the digital sector (3rd edition of the Safari des Métiers, @mbition digital course, etc.);
- growing the number of jobs in the digital sector with 28,000 jobs in the city (+ 1,230 jobs in 1 year), investments in digital start-ups (83 M€ in 2020 for all startups) and 2 scale-ups (annualized return of at least 20% over the last three years) in Nantes that have been noticed (Akeneo and iAdvize in the national ranking of the 120 "remarkable" start-ups of the French Tech);
- organising the 5th Plug IN event by the EMC2 cluster, a scheme aimed at generating cross-fertilisation between industry and tech, and more generally at supporting manufacturers in their digital transformation, in partnership with CARENE;
- ensuring an impressive event programme backed by Nantes Métropole, revolving around four major highlights: Web2day, Nantes Digital Week, DevFest and Digital Change, which were maintained (Digital Change and Nantes Digital Week) despite the health crisis.

Development of the Creative District - Cultural and creative industries

Nantes Métropole's ambition is to develop a European centre of excellence in Cultural and Creative Industries (CCI), located on the Ile de Nantes and its Creative District. Located on a 15-hectare site that once housed the operations of the shipbuilding industry, this area is a unique focal point for creative talent, with a mix of companies, cultural establishments, training and research institutions, collectives and start-ups.

Highlights in 2020 included:

- the **operational launch of the 2020/2024 Public Service Delegation with SAMOA** for:
 - the development, coordination and promotion of cultural and creative industries in the metropolitan area;
 - the operation, management and coordination of Halles 1 and 2, the iconic CCI building in the creative district, a new unifying citizen meeting place (shared and collaborative work space) dedicated to creativity and innovation.

The health crisis has had a massive impact on the cultural and creative industries. Nantes Métropole wanted to stand by the companies affected by the COVID-19 pandemic, in addition to the aid provided by national and regional governments, and to focus its efforts in part on young, recently created companies, which are considered to be more fragile, particularly those in the cultural and creative industries. In a deliberation of 11 December 2020, it was proposed to put in place several emergency measures to provide direct support to companies in the field of metropolitan competences, including a rent exemption for cultural and creative companies, tenants of SAMOA's real estate.

In addition to the health situation and the stoppage of work due to the lockdown, the Halles 1/2 operation suffered some setbacks last winter (liquidation of the company responsible for the "metal cladding" and "waterproofing" work packages, and failure of the company responsible for the "metal roofing" work package, whose contract had to be terminated). These hazards led to a stoppage of the site during which the work suffered weather-related damage. A removal of the executed works and a rework have been necessary, delaying the delivery of the building (initially estimated at the end of 2020) to mid-2023.

As far as events are concerned, many events could not take place or some were redesigned in a 100% remote or hybrid format, for example:

- **"A Priori"**, a contributory journey to discover the facets of design in Nantes (5 and 12 September), a local variation included in the first edition of France Design Week;
- the 2nd edition of the **Local News Festival**, held remotely (20 to 25 September), with 56 conferences, debates and workshops for local media professionals;
- **"l'Art est aux Nefs"**, a major contemporary art workshop-vacuum, organized since 2013 in the Nave of the Île de Nantes, but whose 2020 edition has been redesigned as a new web platform dedicated to art.

"Future Health Care" Sector

The exceptional situation generated by the health crisis has accelerated the process launched by Nantes Métropole in 2018 on the strategy and structuring of the health sector, particularly concerning the support mechanisms for companies. In this context, the President of Nantes Metropole decided in April 2020 to create a metropolitan emergency fund to support innovations related to the COVID-19 health crisis. With a budget of €1 million, it provides initial financing for innovative projects by companies and research laboratories.

Thus, 9 projects were supported:

- **ICO in St-Herblain:** COVID clinical trials and cancer treatment on 15,000 people in France (12,000 patients and 3,000 care staff) to describe the impact of COVID-19 on patients and staff: serological evolution, clinical presentation, epidemiology, health economics and psychology (€200k investment grant);
- **Bertrand Cariou's laboratory at the Nantes University Hospital:** study of a cohort of more than 2,000 diabetic patients to define the predictive factors for the most severe forms of COVID-19 and to establish recommendations for the management of diabetic patients (€60k in operating aid);
- **Pierre-Antoine Gourraud's laboratory at the Nantes University Hospital:** study of data from calls to SOS Médecins in the context of the care of COVID-19 patients and data from the Nantes University Hospital in order to define a predictive model useful in the period when lockdown lifts in order to forecast the evolution of care in health establishments (€40k investment grant);
- **Brigitte Dréno's laboratory at the Nantes University Hospital:** study on the effectiveness of doxycycline in COVID-19 infection to treat patients detected at the first symptoms by their general practitioner in order to limit hospitalisations. This study is part of the strategy for lifting lockdown (early blockage of viral infection, reduction of the contagious period and maintenance at home): €50k in operating aid;

- **Xenothera in Nantes:** launch of clinical trials of a drug to treat coronavirus infections using protective antibodies that neutralize the virus and prevent it from multiplying (€200k in operating aid);
- **OSE Immunotherapeutics in Nantes:** innovative treatment of COVID-19 using peptides sorted and selected by an artificial intelligence algorithm (€200k in operating aid);
- **AFFILOGIC in Nantes:** design and production of an innovative medical device to perform COVID-19 tests. Project carried out by 4 companies, 3 of which are in the Nantes metropolitan area (€150k in operating aid);
- **AXELIFE in Saint-Nicolas-de-Redon:** design and manufacture of a medical device to guide Covid patients based on the measurement of pulse wave velocity (€50k in operating aid);
- **BIOLOGBOOK in Nantes:** development of software for the detection and orientation of COVID-19 patients based on an innovative statistical analysis method of metabolic data (€50k in operating aid).

On the other hand, Nantes Métropole is specifically involved in the launch of the "Station 5 totem building" project. The latter aims to federate the players in the sector around the health of the future, to optimise innovation, research and development capacities.

Manufacturing - "Factory of the future" - Advanced manufacturing technologies

Created in 2012 on the initiative of the EMC2 competitiveness cluster, with the support of the State (future investment program), local authorities, industrialists and academic players in the region, the Jules Verne IRT has seen its development slow down under the effect of the health crisis in 2020, particularly with regard to the aeronautical and industrial sectors.

The IRT Jules Verne has launched a project to build a new 6,500 m² building for mixed industrial and tertiary use in 2019, located on the Jules Verne Industrial Innovation Cluster (PIIJV). It will host its headquarters and its various collaborative R&D activities. The delivery of the building, initially planned for the end of 2021, has been postponed to the summer of 2022 following the health crisis and its impact on industrial activity. Nantes Métropole will provide - subject to the applicable aid conditions - €1 million in support for the project.

The IRT Jules Verne was heavily involved during the COVID crisis by contributing to the recovery plans (technological innovation in the aerospace, naval and automotive sectors, etc.).

In 2020, the Fab Academy and the UIMM training centre opened on the Jules Verne industrial innovation cluster. By 2025, it is planned to accommodate 7,000 jobs, 700 researchers and 1,500 students.

"FOODTECH" sector

Nantes Métropole continues to provide guidance and support for the establishment of a metropolitan Foodtech community, in collaboration with the Region, and particularly by:

- supporting and backing the **NUTReVENT** event, which is aimed at players in innovation, research and the industrial world at the crossroads of food and health. The event is organized by Eurasanté, Valorial (a competitiveness cluster dedicated to food) and ABT (a competitiveness cluster dedicated to health) in partnership with the regions of Hauts de France, Brittany and Pays de La Loire, Lille Métropole, Rennes Métropole and Nantes Métropole, with a view to the edition scheduled for Nantes in 2022;
- helping to draft the action plan for the Metropolitan Territorial Food Project (PAT);
- coordinating Nantes Métropole's involvement in the agri-food sector with innovation players (regular meetings with Valorial and site visits): MIN, ONIRIS innovation centre scheduled for 2020 have been postponed due to COVID);
- within the framework of the Covid crisis: monitoring and special support for the local sector, with the support of the MIN, organising short circuits, optimising deliveries, procurement, etc.

Maritime sector

The rise of the maritime sector, which began two years ago, has continued, with:

- In the water sports sector:

Progress on the water sports action plan (validated in 2019 around 4 structural priorities and 20 actions). The first achievements include:

- The electric factory project, future showcase site for the maritime/water sports sector of the future (delivery of the first batch in July 2021);
- The launch of the "Sailing Lab" on 19 December 2019 and its experimental component in 2021;
- The launch in 2020 of the land strategy study (in order to have a short, medium and long term visibility on the real estate and land availabilities of the sector, to optimise the exogenous implantations and the development of endogenous companies);
- The creation in 2020 of the top 50 exogenous companies to prospect (NSD);
- Nantes Métropole's support for the new regional cluster NAUTIHUB, whose management is delegated to the CCI. The cluster is co-financed by the CARENE and Sables d'Olonne conurbation.

- In the naval sector:

It is a real sector that is emerging on the French west coast and in the Nantes Saint Nazaire area. They include start-ups, major naval industries, the large maritime port (committed to an energy transition strategy), construction sites, design offices, naval architects and makers. Academic players (Centrale Nantes, ENSM, ENSA, UN, etc.) and a high-performance and atypical innovation ecosystem are also at work. In this context, major shipowners are fully committed to the decarbonisation of maritime transport (MAERSK, Louis Dreyfus Armateur, etc.). The skills are present and recognised, synergies are organised around the European association Windship and the competitiveness clusters. The first achievements initiated in 2019 are continuing: Neoline contracts with Manitou and Bénétiau, Ariane 6 contract signed with Zephyr and Borée.

- Renewable Marine Energy (RME):

Carrying out a study on the potential Loire estuary tidal turbine with, carried out with CARENE, Atlantic Sea cluster, the Loire Estuary Public Interest Group (GIP) and the major port of Nantes Saint-Nazaire, as well as the Brittany Atlantic Sea and EMC2 competitiveness clusters.

It is worth noting the co-financing of the Seanergy webinar (on the bridges to be created between the aeronautics and MRE sectors).

EMC2 competitiveness cluster

The EMC2 competitiveness cluster, a network of industrialists and "academics", aims to be the driving force behind innovation and development in the region concerning manufacturing technologies related to the aeronautical and marine industries. Its reference local area corresponds to the regions of Brittany and Pays de la Loire.

In 2020, in a new context of regionalisation of clusters, EMC2 was strongly mobilized to support industrial players during the crisis. Nantes Métropole, along with the Pays de la Loire region, supported the cluster's activities in 2020. These include the following actions:

- involving the cluster with: the identification of 3D printing players and the launch of "Meet3D", the contribution to the recovery plans (aerospace, automotive industries, etc.) and the support of manufacturers in responding to calls for projects, the organization of webinars, etc;
- launch of the manifesto for an eco-responsible industry around five priority areas: (1) a sober and ecologically respectful industry to meet environmental challenges; (2) an industry that places people at the heart of its concerns to meet health and social challenges; (3) an efficient and innovative industry to meet the challenges of competitiveness and

competition; (4) an industry that is resolutely collaborative and inclusive to support local areas and sectors; (5) a strategic industry to meet the challenges of sovereignty. The scheme has nearly 75 signatories;

- pursuing the SPIRIT 2025 roadmap: driving the innovation ecosystem (performance in terms of collaborative R&D projects), European development and pursuing strategic partnerships (IRT Jules Verne, NExT, SATT OV, Images et Réseaux); strategic sector committees, including the one for production resources. The EMC2 cluster also provides support for transformation projects initiated in 2020 during the crisis;
- the "co-sponsorship" of the Pays de la Loire's application for the "European Digital Innovation Hub" (AI specialisation) with Atlanpole.

"Images et Réseaux" (I&R) competitiveness hub

A world-class cluster bringing together players in new technologies and digital uses in Brittany and Pays de la Loire, I&R's ambition is to develop research and innovation in six technological fields: digital confidence & security - data & intelligence - networks & infrastructures - hardware & software - photonics - interactivity & immersivity, in the service of uses (agriculture, cultural and creative industries, industries and services, health, local areas). To do this, the goal is to form closer ties between the business and academic communities, and provide support for marketing the technologies derived from their R&D.

As they enter their fourth phase, the two digital competitiveness clusters of the West of France, Images & Réseaux and TES, announced their merger in order to position the Brittany, Normandy and Pays de la Loire Regions at the forefront of digital innovation in France and Europe by 2022. In 2020, it was decided to favour a strategic alliance over a merger (an alliance approved by the Prime Minister at the end of December, allowing the 2 clusters to maintain their "Competitiveness Cluster" label).

"Atlanpole Biothérapies" competitiveness cluster

In 2020, the Atlanpole Biotherapies cluster was awarded the "phase 4" label by the French government for competitiveness clusters until 2022.

From the start of the health crisis, the cluster's members have been mobilized to fight the COVID-19 virus, particularly through patient care, the development of tests, treatments and vaccines.

Two Nantes-based companies are involved in the vaccine race:

- **Valneva**, with a classic approach of injecting inactivated virus that has won over the British government (order of 190 million doses). Discussions have also been initiated with the European Commission for the supply of 60 million doses;
- **Ose Immunotherapeutics**, with an innovative and disruptive technology based on the stimulation of T lymphocytes, capable of destroying virus-infected cells in a targeted manner while sparing the healthy ones (project directly supported by Nantes Métropole via the health innovation fund).

On the therapeutic front, the company **Xenothera** is developing a treatment based on the injection of polyclonal antibodies capable of neutralizing the virus. The first clinical trials have been launched in several care centres in France, notably at the Nantes University Hospital (again, with direct support from Nantes Métropole).

The Mer Bretagne Atlantique cluster (PMBA)

This cluster with an international reach was formed to encourage the development of collaborative R&D projects. These projects drive member businesses' growth by marketing new products, services or processes generated through research.

A strong local presence is one of the prerequisites for competitiveness clusters to succeed. The cluster's expansion into the Pays de la Loire region in 2014 boosted its impact across a broad catchment area straddling the Brittany and Pays de la Loire regions.

In 2020, the cluster strengthened its local presence through:

- a collaborative partnership with the other clusters in the area: I&R, ABT, EMC2;
- ensuring involvement in the programmes and projects that are helping to structure the maritime sector (WEAMEC, ENSM development committee, SteerCo, working group on the potential Nantes Saint-Nazaire estuary tidal turbine, etc.);
- work in partnership with Nantes Métropole, including facilitation initiatives and a strategic study of the maritime sector. The Green Ship project (zero emission propulsion, eco-design and use of hydrogen) has been the focus of discussions on MRE.

The PMBA in 2020 represents:

- 23 collaborative projects with metropolitan stakeholders;
- 63 metropolitan members;
- 1 event on the local area and 13 organized with the participation of metropolitan stakeholders;
- 51 visits to companies and research institutes;
- 43 labelled projects;
- 79 SMEs involved in collaborative projects;
- 30 SMEs supported towards European projects.

Néopolia

Created at the initiative of the Chamber of Commerce and Industry of Nantes and Saint-Nazaire, Néopolia is a network that included at the end of 2018: 245 companies serving the industrial development of the Pays de la Loire region, representing 130 professions, more than 300 remarkable skills and 45 markets covered. Together, these companies account for more than 30,000 jobs, bringing together 208 industrial companies in the region. Neopolia plays a particularly active role in the local area through projects or its involvement in structuring bodies for sectors such as Renewable Marine Energy (RME). For nearly 15 years, it has guided and supported collaboration between companies in the conurbation by coordinating five business clusters: **Aerospace, Land mobility, Offshore wind and MRE, Marine, Energy.**

Nantes Métropole guides and supports Néopolia in its initiatives, which help to establish and develop SMEs, very small businesses and large companies, and in the support it provides to collaborative projects and synergies with the metropolitan ecosystem.

Néopolia in 2020 represents:

- €19.5m in turnover;
- participation in nine events in France and abroad;
- in-depth work to structure the network's growth and professionalisation.

Key figures in 2020: Atlanpole Innovation Hub Deep Tech

- A network of 480 companies and 259,991 jobs;
- 296 diagnostic surveys, of which 148 were in-depth assessments;
- 43 new projects supported, of which 20 were being set up, 3 was in development and 20 were being accelerated).
- 19 new companies;
- 122 companies supported by Atlanpole, of which: 42% were in digital and Cultural & Creative Industries, 26% in biotech healthcare, 17% in sea, energy and the environment and 29% were in advanced production technologies.

- 71 collaborative research and innovation projects set up by Atlanpole and certified by three competitiveness clusters (EMC2, Imaging & Networks, and Atlanpole Biotherapies), involving 78 companies.

Academic innovation: incubators and student entrepreneurship

Nantes Métropole continues and structures its support for student entrepreneurship. In addition the "Les Entrep'" programmes managed by the Réseau Entreprendre (which every year supports teams of students planning to set up a company), Nantes Métropole continued to support the following initiatives and incubators in 2020:

- launched in 2015, "Odyssée" is a shared training and incubation support platform is supported by two higher education incubators: the Institut Mines Télécom Atlantique (MTA formerly École des Mines) and the Alliance (shared by Audencia, Centrale Nantes and the École Supérieure d'Architecture/ENSA);
- the academic incubation scheme run by the Université de Nantes PEPITE (hubs for student innovation, transfer and entrepreneurship), supported by Nantes Métropole since 2016.
- Mash up: student entrepreneurship awareness by students.

By making use of innovative business creation players such as Atlanpole and the entire innovation ecosystem (Mash up, etc.), Nantes Métropole facilitates an effective and comprehensive support offer across the local area.

FIL Innov': Academic innovation with the University

This scheme, led by the universities of Nantes, Angers and Le Mans, proposes to structure the supply of university skills in innovation (on the basis of 8 major sectors identified), so as to bring companies and public research players closer together by spreading a culture of innovation in both academia and the world of business.

Providing a genuine tool for interface between laboratories and businesses and the players of the value-creation ecosystem (TTOs, incubators, science parks, competitiveness clusters, etc.), the system has now been built and deployed, with the creation of a new 'sector engineer' job profile. With scientific expertise in managing innovative projects, these professionals enable optimized handling of requests for support.

Nantes Métropole funds the project as part of Campus Nantes. The system will also be available as part of the NExT programme backed by the I Site label.

Innovation through demonstration: the European mySMARTLife project (H2020)

Nantes Métropole, Hamburg and Helsinki were selected under the EU Horizon 2020 programme to implement the EU project "mySMARTLife" on smart cities.

Nantes' project is designed to test innovative solutions to increase the overall energy efficiency of the metropolitan area while at the same time providing better living conditions for its citizens. Nantes Métropole, which is coordinating implementation of the local project, is being supported by the following nine local partners: Engie, Enedis, Nantes Métropole Habitat, Tan, Cerema, Nobatek, Atlanpole, Télécom Bretagne and École des Mines de Nantes (IMT Atlantique). The five-year "mySMARTLife" project (2016-2020) will address energy renovation, energy efficiency and renewable energies in private co-owned buildings, detached houses and social housing, the production and storage of renewable energies, the smart management of street lighting, electromobility (buses, vehicles and electric bikes), the management of urban data and the development of an energy datalab.

In 2020, the majority of the actions for the deployment of the local demonstrator and the transversal actions at the European consortium level have been implemented. The main activities consisted involved:

- Finalising the implementation of energy and mobility actions (building renovation, photovoltaic power plants, electric vehicle charging stations, etc.);

- Setting up the follow-up and the collection of measurement data which will be used as a basis for the follow-up of the evaluation indicators (monitoring) of all the actions of the project;
- Preparing the integration of the monitoring data in the urban data platform;
- Developing communication tools: several videos, a web page on Nantes Métropole's website (<https://metropole.nantes.fr/mysmartlife>) and promotion tools (summary sheets presenting the project's deliverables and actions);
- Drafting the deliverables to be produced for the European Commission as well as the annual financial and activity reports;
- Providing feedback on the mySMARTLife project (20 interviews + 30 questionnaires, a report and a synthesis);
- Providing feedback on a key action of the project: the extension of the urban data platform and the research of data use cases (report and synthesis).

Test-driven innovation Nantes City Lab

In 2017, Nantes Métropole installed a new system to support project owners in need of full-scale testing facilities: the Nantes City Lab. In this case, the whole metropolitan area becomes the testing ground. Nantes Métropole guides owners with their projects and provides a range of testing sites, facilities, data and engineering to test and accelerate their concept in life-size conditions. This scheme, which is unique not only in the way it operates but also in its governance, is based around a system of quality certification. The steering committee is made up of representatives of the business, voluntary-sector and academic eco-system. Its role is to enrich the projects, which must meet criteria established by the members of the committee.

In 2020, the number of projects approved since the creation of the Nantes City Lab has risen to 22. The projects focus on new uses for the city and the challenges of the energy transition, such as public lighting (two projects), urban logistics (two projects), urban agriculture (two projects), access to public space for vulnerable people (three projects), housing (two projects), energy data (two projects), urban furniture and spaces (six projects) and mobility (two projects), education (one project).

These first three years have confirmed that test-driven innovation is a truly successful way of doing things. The Nantes City Lab is known as a place where eco-system's players can meet and exchange ideas, which in turn accelerates projects. By playing an active role in the testing field, the local authority is broadening the existing range of innovation support systems. The year 2020 was an opportunity to take stock of the Nantes City Lab's activities (project leaders, members of the governance) and to question them on four themes: the service offer, the certification, the projects and the governance.

These interviews allowed us to identify three directions for the future:

- Develop the system as a tool for the local area, for the city's construction, by strengthening the use of the experimentation process within the local authority and with the stakeholders of the ecosystem;
- Develop a territorial community of experimentation with a specific animation and through the promotion of the returns of experience;
- Stimulate momentum in the local area by proposing calls for projects or other approaches, to encourage the emergence of innovative projects in the service of transitions.

Adapted for the maritime sector at the end of 2019, the experimental approach was favourably received by the players in the ecosystem in 2020, thus confirming its relevance. In 2021, the first full-scale experiments of the Nantes City Lab Maritime are expected to take place.

High-speed broadband is being rolled-out across the metropolitan area

Nantes Métropole aims to expand high-speed broadband coverage to the entire area by 2022. In keeping with the French High-speed Broadband Plan, the authority is working to ensure complementarity between public intervention and private initiatives. **Private operators are investing in ultra-high-speed internet across the Nantes Métropole area.** Following the French government's Call for Expressions of Intent to Invest issued in 2011, operators SFR and Orange pledged to connect 23 municipalities in the conurbation with fibre optic broadband for individual customers by 2022.

The operators continued their rollout operations in 2020:

- SFR continues to operate in all 14 of the municipalities it serves: Bouaye, Bouguenais, Brains, Couëron, Indre, La Montagne, Le Pellerin, Saint-Herblain, Rezé, Saint-Jean de Boiseau, Sautron, Les Sorinières, St Aignan de Grand Lieu and St Léger les Vignes. -les-Vignes. As of 1 January 2021, 115% of the SFR zone had access to the fibre optic broadband network (based on 2014 INSEE survey).
- Orange continues to operate in all 9 of its allocated municipalities: Basse-Goulaine, Carquefou, La Chapelle-sur-Erdre, Orvault, Sainte-Luce-sur-Loire, Saint-Sébastien-sur-Loire, Vertou, Thouaré-sur-Loire and Mauves sur Loire. As of 1 January 2021, 92% of the Orange zone had access to the fibre optic broadband network (based on 2014 INSEE survey).

At the same time, the fibre roll-out continues at a steady pace throughout the municipality of Nantes, which is open to all of the operators in direct competition (85% of homes are now served by fibre broadband). In February 2017, in the presence of the mayors of the Nantes Métropole municipalities, Orange and SFR had each signed the agreements on monitoring and planning the fibre roll-out, which set out their commitments to providing 100% of homes with access to fibre broadband by 2022. In July 2018, the French government issued a resolution approving the commitments made by operators Orange and SFR to provide a target of 92% of homes with fibre access by end-2020 and 100% by 2022. As such, these commitments are now legally binding and punishable by law in the event of failure to honour them.

Quarterly meetings continue to be held to follow up on their rollout operations, and particularly the yearly meetings with mayors organised under the aegis of the First Vice-President of Nantes Métropole and the Deputy Mayor of the City of Nantes for digital technology.

In connection with the website set up by the ARCEP (cartefibre) to inform users on the progress of fibre roll-outs, the consumer communication plan launched in 2016 once again proved its effectiveness this year, with a significant drop in requests from individuals. The "Nantes Networks" Public Initiative Network (RIP) continued to grow in 2020 despite the crisis. The network, which operates under a public service delegation contract, markets wholesale-priced service offerings for professionals to around 50 international, national or local operators. This high-speed network is a key asset in developing the local area and enhancing its appeal. It will be transferred back to Nantes Métropole on termination of the contract (in 2037). It should be noted that as of 1 January 2021, the Very High Speed Broadband Department will be transferred from the Research, Innovation and Higher Education Department to the Digital Resources Department.

Key figures for 2020 - Nantes Networks

- 3,200 sites connected;
- 114 business zones covered by fibre broadband;
- 11 mobile phone antennas;
- 1,055 km of network length.
- More than 70 operators present.
- Plus de 70 opérateurs présents.

HARNESSING THE ECONOMY TO DRIVE DEVELOPMENT

In order to consolidate its position as the economic capital of the Great West, Nantes Métropole is asserting its specificity among the major European cities by investing in the field of responsible economic development. It does this by relying on its priority sectors and promoting practices related to corporate social responsibility and by carrying the vision of sustainable economic land development.

With its dynamic innovation ecosystem and pleasant living environment, Nantes Métropole welcomes new companies that create jobs and supports the development of existing companies. Its diversified economic fabric has enabled it to resist the economic difficulties linked to the health crisis.

A year 2020 marked by the health crisis

The economic impact of the health crisis is still difficult to measure on a metropolitan scale. Feedback from economic players tends to show a two-speed economy, with sectors of activity very heavily affected (aeronautics, catering, commerce, hotels, culture and leisure, and events) and sectors that have benefited from the context, some of which have seen growth in activity (digital activities, health, agri-food). The diversification of Nantes' economic fabric has made it possible to mitigate this crisis and to partially compensate for the loss of jobs from a global point of view.

Another trend in 2020 concerns emerging sectors of activity with a significant evolution of projects around the new economy of ecological, societal and environmental transitions. The crisis has undoubtedly accelerated the local emergence of new projects in these sectors, such as renewable energies (including marine), new propulsion, the circular economy or food. In addition to these "native" positive-impact business sectors, many companies have taken advantage of this context to rethink their business models by developing new, more responsible and sustainable products and by integrating a much stronger internal CSR dimension.

The development of metropolitan businesses

In 2020, Nantes Métropole's services monitored 390 business projects, including 269 new projects based on development, transfer, new creations and establishments (for the record, 196 projects were completed in 2019 and 162 in 2018).

By 2020, 103 projects have been completed (i.e. almost 1,112 jobs maintained and an estimated 1,120 jobs created within three years). The typology of completed projects is characterised as follows:

- 44% are business start-ups (46);
- 34% of movements within the metropolitan area (35 projects);
- 10% of new establishments;
- 6% on-site extension and 6% "other".

The year was also marked by local sourcing in support of the DIRECCTE in mobilising the supply and production of protective equipment in response to the pandemic. 150 companies were contacted and involved in the effort to supply hydroalcoholic gel, protective masks, medical consumables and respirators.

Finally, despite the lockdown period and the economic uncertainty linked to the health crisis, many business projects have been carried out. Examples include:

Open Landes - Nantes

Open Landes was supported in its search for premises in Nantes. It is now located in a 350 m² building (formerly La Poste) at 10 Rue de l'île Mabon in Nantes. The community of talents wishes to prefigure the great project of Open Landes and to diversify its offer as close as possible to Nantes, the prototyping phase being completed.

GENERALI Assurances - La Chantrerie site

At the end of 2020, the GENERALI Assurances group moved into a 3,500 m² office building built by Cogedim in the Parc de La Chantrerie. This means 200 jobs transferred from the Sainte-Luce site + creation of 50 additional jobs.

PA.COTTE - Sainte-Luce

Alexander Cotte, CEO of the PA.COTTE Group, is launching Living Packets, a company that produces packaging that can be reused 1,000 times before recycling. The production line, calibrated at 100,000 units/year, will be deployed on the Sainte-Luce site, as an extension of the R&D centre. About 20 of the 65 employees at the R&D centre will be assigned to this production. The creation of 25 new jobs is envisaged in the short term to manage the production line, ensure quality management, and program the machines and peripherals.

"Activity" business village at Océane Sud in Les Sorinières

Inauguration of the business village in September 2020. On a 1 hectare site, Concept Ty has built 5,000 m² of floor space, divided into cells for rent or sale at controlled prices, to accommodate 9 companies and 90 employees.

JVD - Rezé

Expansion project within the metropolitan centre at Les Isles in Rezé (50 employees out of a total workforce of 120). French manufacturer, JVD designs, innovates and manufactures accessories and equipment for collective and hotel hygiene (turnover of over €30m).

Ruffault Traiteur (Bateaux Nantais)

Establishment of this Nantes-based institution in the food-processing sector in Rezé. Construction and delivery of a 3,000 m² building to accommodate 30 jobs.

WIKIPark project - Parc des Naudières in Sautro

Opening of the park by the new managers of the Wikipark group in July 2020. With a total area of 5 hectares, the park welcomes an average of 1,300 visitors per day. The work carried out has made it possible to strengthen the landscape identity and safety of the site, while preserving the original image of the place, namely a friendly, human-sized and popular park.

ZAC Hauts de Coueron

Opening in January 2020 of the restaurant "La Fraterne", supported by Titi Floris and Adapei. Delivery of the Local Company craft village - a 2,250 m² complex, divided into small craft cells and warehouses for VSEs and SMEs.

ZAC AR MOR – Saint-Herbain

Support for the Euptouyou business centre extension project: sale of a lot for the construction of 4,160 m² of additional floor area. The Euptouyou WorkCenter is a new real estate concept designed for large companies looking for flexibility, entrepreneurs, VSEs and SMEs, self-employed workers and companies setting up in the city. It is also developing an offer oriented towards nomadic professionals and teleworkers, in total coherence with the telework challenge led by Nantes Métropole.

Bas Chantenay - Usine Électrique sector

Continued marketing of the building dedicated to the maritime industry (Sogestran). Negotiations with the investor KEYS Investissement to finalise the economic program of the sector - 8 000 m² of floor area approximately. Continued exchanges with the Joseph Paris group to enhance its site.

Support for the development of corporate crèches

In line with the approach taken to facilitate and encourage the development of employee services, two company crèches were supported in 2020:

- the 1st Porte de Vertou with a capacity of 30 children, at the foot of a new 2,600 m² office building;
- the second in the heart of the "Frêne rond" business park, also with a capacity of 30 cots.

A third crèche is currently under construction at the Nantes Agropolia food processing centre. With a capacity of 45 children, it will provide an additional service to MIN companies.

Enhancing the appeal and commercial reach of the Nantes conurbation

The year 2020 has been particularly difficult for businesses in the local area with two periods of lockdowns and closures for many businesses. In this context, Nantes Métropole has undertaken actions to encourage the sustainable recovery of commercial activities, in particular by supporting the deployment of the local sales platform "Ma Ville Mon Shopping", by public communication actions to promote local consumption and by setting up a rental assistance fund for establishments closed in November 2020. Nantes Métropole has also continued its actions on the attractiveness of the city centre, on the development of local commerce (opening of the first Boutique à l'Essai in Brains, commercial studies carried out in Thouaré-sur-Loire, Couëron as well as in the Beauséjour, Longchamp, Sainte-Thérèse and Rond point de Vannes neighbourhoods) and on the urban renewal of major commercial centres (urban studies carried out on Atlantis and the Route de Vannes).

The 2020 Commercial Space Observatory does not yet incorporate the impacts of the health crisis. The indicators remain stable at the town centre level, at the end of 2020, with a low vacancy rate (3%) and relatively stable since 2014 (oscillating between 47 vacant premises in 2015 and 50 in 2020), a high commerciality rate (low share of non-market services). The commercial strategy operated in the city centre is based on its differentiation from the city's outskirts. In commercial terms, differentiation initially involves the emergence of smaller concept stores by independents and name brands, whose spatial concentration creates a distinctive identity and sets Nantes' city centre apart from the outskirts, followed by a second phase in which national brands or international market leaders are brought in as one-off stores in the metropolitan area. The average turnover rate of commercial premises currently stands at 7%. The year 2020 is marked by a lower rate of renewal of the downtown supply. There were 78 takeovers in 2020 compared to 133 in 2019. Renewal mainly takes place in favour of commercial activities (44 activities in 2020) and catering (around 22 renewals in 2020 - strong slowdown). These new locations are spread throughout the city centre with a more marked concentration on certain streets (Contrescarpe, Mercœur, Rubens, Fosse, Franklin and Copernic in 2018 and 2019, Rue du Moulin, Budapest, Lafayette in 2020). The new concepts and brands are fully in line with consumer expectations (organic, fair trade, Made in France, bespoke, sustainable, etc.).

Nantes' circular economy sectors are stepping up their structuring despite the health crisis

Even though the health crisis has greatly disrupted circular economy activities, especially those of reuse, many circular economy projects, supported by Nantes Métropole, have emerged or been strengthened in 2020, such as the "Supporterterre" sports recycling centre, Les Alchimistes (mechanical composting of bio-waste), or "Bout à Bout" on a new offer of glass containers for take-away food.

Three years after the adoption of Nantes Métropole's circular economy roadmap, the structuring of circular channels is increasing, particularly in the three main priority loops: bio-waste, construction and public works, and repair and reuse, even if the definitive change of scale still requires time. Service offers are multiplying, collective projects and structuring tools are being deployed around more global and integrated circular approaches, such as, for example, the selective deconstruction of buildings or the reinforcement of the sorting and recovery of construction waste. They also contribute to the creation of new jobs and skills, particularly in the field of integration.

In order to accelerate this process, Nantes Métropole mobilised very strongly in 2020 on projects or approaches that will have a significant leverage effect in the future: Increased support for project leaders to facilitate access to land, the drafting of a regional guide to circular public procurement, the

structuring of a local digital reuse sector (computers, telephones) to create both added value and jobs in the region but also to fight against the digital divide, the launch of a "zero plastic" study with economic players to encourage their replacement by bio-sourced materials, and to improve the sorting and recycling of waste that cannot be avoided.

Making one of the commitments of the Energy Transition Roadmap an operational reality

Nantes Métropole is backing an initiative by "Plein Centre", an association made up of 450 shops and businesses in the centre of Nantes, to recruit an energy transition facilitator, who will be tasked with enlisting city-centre retailers and offering them guidance on the energy transition, and more specifically how they can reduce energy consumption, manage and reduce waste, etc. The action plan will be rolled out over a three-year period.

The local authority is also supporting a trial in the Vertonne business park (Vertou) on the themes of energy, waste and travel. A first phase of the action plan has now been launched in conjunction with the municipality, the business club (REV), ADEME and the CCI. The aim is to carry out a pooled collection of waste electrical and electronic equipment.

Nantes Métropole's Commercial Property Assets (PIEM)

To ensure that all businesses benefit from suitable premises, Nantes Métropole offers a range of public commercial property. The public service delegation contract was renewed at the end of 2020 with Nantes Métropole Aménagement. The city's real estate offer is mainly positioned to support business creation or development and the backing of specific strategic sectors, such as the 10 business incubators and company premises offering shared services for start-ups (Nantes Créatic, Rezé Créatic, Couëron Créatic, Hub Créatic, Mallève Bureaux, Mallève II, Les Granits, Bio Ouest Île de Nantes 1, Nantes Biotech). In figures, it represents:

- 30,000 m² of rental space;
- 235 tenants, 883 jobs;
- 51 new tenants in 2020 including 22 entrepreneurs;
- a 92% occupancy rate.

Supporting entrepreneurship

Nantes Métropole supports stakeholders engaged in providing start-up guidance and support (BGE, L'Ouvre-Boîtes 44, Bâtisseurs, CoopChezVous, Oz, Coopérative d'Installation en Agriculture Paysanne, Union Régionale des Sociétés Coopératives et Participatives) and funding projects (ADIE, Initiative Nantes, Fondes, Réseau Entreprendre Atlantique).

It also provides a range of local services for entrepreneurial ventures (in 2020 more than 1,000 projects were supported and some 500 start-ups/take-overs received funding).

To support entrepreneurship, Nantes Métropole is also taking action in the following areas:

- coordination of the Sup'Porteurs de la Création 44 network, which brings together stakeholders providing support to start-ups and aims to improve the visibility and transparency of the services on offer to project owners;
- the 13th edition of the entrepreneurs' fair has been digitised in order to maintain this event in the health context. 17,200 entrepreneurs were connected in 2020, 54% of whom were women;
- renewal of the "Osez entreprendre" scheme in 2021 by strengthening project detection and, in particular, "outreach" and activity tests to facilitate and secure the business project. In 2020, nearly 280 people were accompanied before and after the creation of their company.

The influence of the local area

The Nantes Saint-Nazaire Développement agency has 4 missions:

- to prospect for businesses, investors and talents in France and abroad;
- to host and support companies, investors and talents;
- to coordinate and promote the local area for professional meetings;
- to coordinate, promote and market the local area in France and abroad.

In 2019, with 85 companies settling in the area, the Nantes Saint-Nazaire Développement agency planned the creation of 1 060 jobs within the next three years.

Key figures in 2020

- 65,450 establishments (including sole traders, or one-person businesses): an increase of 2,093 establishments.
- 278,214 jobs (private employees): up 2.8% on 2017 (compared to 1.3% nationally in France).
- 10,801 new establishments as of 1 January 2020.
- 9,453 businesses created. The Nantes metropolitan area accounts for 60% of the creations in Loire-Atlantique and nearly 28% of the creations in Pays de la Loire.
- 7.1% unemployment rate (8.9% at national level);
- Nantes' central business district is one of the most vibrant in France, with more than 1,200 commercial businesses, 500 bars and restaurants 200 service businesses and an exceptionally low vacancy rate (2.4%).

Continuation of actions related to the commitments of the Energy Transition Roadmap

Nantes Métropole has continued to support the Plein Centre association, an association of shopkeepers in Nantes city centre, in implementing an energy transition action plan for shopkeepers: reducing energy consumption, managing and reducing waste, etc

In addition, exchanges with local stakeholder (consular chambers, business associations, clusters, etc.) have been maintained and will make it possible to initiate partnership actions on the energy renovation of tertiary buildings in particular.

Support for setting up in the region by Nantes Saint-Nazaire Développement

Companies "supported" and set up with the help of NSD in the Nantes Saint-Nazaire metropolis in 2020, i.e. **67 projects and 1,199 jobs over 3 years.**

To remember for the year 2020:

- 63 companies located in the metropolitan area;
- 33 companies from Ile de France;
- 11 foreign-owned companies;
- 33 companies from the prescription.

MAJOR PUBLIC FACILITY PROJECTS

In order to pursue its ambitious urban development policy and further enhance its national and international appeal, Nantes Métropole is building major facilities that contribute to the dynamism of the local area.

The new Nantes train station

France's sixth-largest regional station, Nantes station and its multimodal exchange hub continued the transformation initiated in September 2017 in 2020.

Some 11 million passengers currently pass through the station each year, with this number expected to reach 25 million by 2030. In response to this growing use of the facilities, the station is being thoroughly modernised and extended to make it more ergonomic and to offer passengers much better services and comfort.

Work on the new mezzanine and reconfiguration of the North and South Station buildings was completed in the summer of 2020. The commissioning of this emblematic facility was made official by the project partners on 19 November and the mezzanine was opened to the public the following day.

Additionally, to optimise convenience and safety for travellers using all forms of transport, the SNCF and Nantes Métropole are redeveloping the multimodal transport hub at the Nantes train station (in partnership with the French Government, the Pays de la Loire Region and the Loire-Atlantique Department).

In the south, Nantes Métropole has supported the preliminary studies and work carried out by the SNCF needed to obtain the necessary rights-of-way for the Southern Exchange Hub and the completion of the Pré-Gauchet Comprehensive Development Zone. The "Parcotrain" has been demolished and the installation of digital equipment for the new SNCF-Réseau telecom centre has continued, with the aim of demolishing the existing building in early 2021. This important step will mark the end of the operation to free up the railway land adjacent to the station, to the benefit of the modernisation of these technical installations and the development of a new mixed and attractive district.

Finally, the first work to reconfigure the public spaces adjacent to the south station began at the end of the year.

Beaulieu Sports Centre

Built in 1973 and still the largest covered sports facility in Nantes, the Beaulieu sports centre is currently undergoing major work. The complex has been undergoing a refurbishment and modernisation programme since spring 2016. In addition to a building upgrade, user facilities have been optimised with new entrances, boxes, a reception area, a shop, and additional ticket offices and toilets. A drug-testing room, a recovery room and a physical preparation room have been added. The capacity of the main room ("Salle 5 000") has been increased from 4,700 to 5,400 seats.

In 2019, the annex room was re-commissioned after refurbishment work. The activities of the specialised rooms were transferred to the old rehabilitated gymnasium in order to allow the last phase of work, lasting 13 months with the lockdown.

In December 2020, the specialist rooms (judo/aikido, karate/taekwondo, gymnastics, boxing and weight training/weightlifting) were delivered, completing the programme of works on the building. Their reopening will allow the various users to have improved practice conditions: increased practice area, dedicated changing rooms, thermal and acoustic comfort, new storage and association rooms.

The Wholesale Agricultural Produce Market (MIN)

Since it was opened in March 2019, the new MIN has hosted around 100 businesses (wholesalers, producers and logistics services) on its 16-hectare surface area. An agrifood cluster has also been set up immediately next to the market.

Vertou and Neustrie Park-and-Ride (P+R) car parks

In line with Nantes Métropole's travel policy, in October 2016 the metropolitan council approved plans to build two P+R car parks at Porte de Vertou and Bouguenais (Neustrie). Work on the Vertou P+R initiated in October 2018 was completed in August 2020. The new car park will offer approximately 1,000 parking spaces, including 749 spaces in a multi-storey car park, compared to 516 previously. Regarding the Neustrie P+R, the construction started in spring 2019 and was completed in January 2021. This facility provides users with approximately 950 spaces, 783 of which are in the building, compared with 314 previously.

University building in Rue Bias

Under the planning agreement between the national and regional governments (CPER), Nantes Métropole is the project owner of a university building situated at 10 rue Bias in Nantes. The project is part of the university training master plan and will accommodate students in the first year of a health-related course or studying at the pharmacy training and research unit, users of the health university library, doctoral students and research professors, and the university's administrative staff. Following design studies for the project conducted in 2018, the building is scheduled for delivery in Q1 2021.

It is worth noting that studies related to the construction of the new Faculty of Health on the Île de Nantes are currently being carried out under the project management of the Region but with equal funding from the State, the region and Nantes Métropole. In addition to monitoring the pre-programming of this facility, Nantes Métropole was the initiator of a student social catering project included in this operation. The project involves accommodating more than 7,000 students as well as the construction of an underground public car park accessible to future users of the site: namely the healthcare faculty and the future CHU (expected delivery date 2030-2027).

Plan to transfer the Nantes-État railway yard

The Nantes-État railway yard, which is currently located on a 15.8 ha site in the west of Île de Nantes, is going to be transferred. Locating the railway yard to the Nantes Blottereau site will make it possible to optimise railway operations in the conurbation. This transfer aims to free up railway land located at the heart of the metropolitan centre of the future, in particular to combat urban sprawl by allowing the development of the South West Comprehensive Development Zone. At the same time, the aim will be to maintain a capacity for turning trains on the railway line along the route de Pornic in the municipalities of Bouguenais and Rezé, while improving the operation of this line which serves the Grand Port Maritime de Nantes Saint-Nazaire. This project will also, in the end, improve the railway system's operating conditions in the Nantes metropolitan area.

At a total cost of approximately €108m, funded jointly by the French Government, SNCF Réseau, the Region and Nantes Métropole, the transfer is scheduled for mid-2022, with work to clear rights-of-way to end in late 2022.

The University Hospital (CHU) and health district

The aim of the University Hospital and the health district is to provide the metropolitan area with a 21st century public hospital, as part of a major site dedicated to healthcare, which will house patient care, higher education and research all in one highly accessible zone.

Nantes Métropole, in conjunction with the SAMOA and its management, contributed to:

- the development of the project for the future University Hospital on the Ile de Nantes (planning permission obtained mid-2019 for start of construction in September 2020);
- the preparation of the land base (dismantling of the port hangars and the MIN transferred to Rezé, provisional access road, etc.);

- the definition of the urban project for the south-west of the Île de Nantes, thanks to the work of the new project management team (Jacqueline Osty and Claire Schorter) who have come on board to integrate the future University Hospital in the natural landscape of the Île (natural restoration);
- the launch of the related accessibility projects that the project will require (tram line, widening of the Anne de Bretagne bridge, car parks, etc.).

DEVELOPING A SUSTAINABLE CITY, ACCESSIBLE TO ALL

Nantes Métropole is working to shape the city of the future by ensuring balanced local development, boosting urban centres and curbing urban sprawl. To do this, the authority is developing the conurbation as part of a larger development area.

The preparation of the first modification of the Local Metropolitan Urban Plan (PLUm)

After a five-year process of co-construction with the mayors of the 24 municipalities and consultation with the residents and partners of the Metropolitan area, the PLUm was approved by overwhelming majority at the Metropolitan Council meeting of 5 April 2019.

The general guidelines of the PLUm's Sustainable Planning and Development Project (PADD) and their legal transposition through the Planning and Programming Guidelines (OAP) and written and graphic regulations, are structured around three key challenges to ensure the transition to a different development model:

- develop a harmonious city that boasts a good quality of life and solidarity between residents;
- make Nantes Métropole a standard-setter for the green and energy transition;
- work to create an innovative, creative, attractive and influential city.

By 2030, the plan for the local area aims to:

- create the conditions for the creation of more than 60,000 jobs, including 25,000 to 30,000 in Nantes;
- accommodate more than 75,000 inhabitants;
- build at least 6,000 new homes per year, including 3,000-3,100 per year in Nantes;
- achieve 72% of journeys made by alternative means of transport to the private car;
- reduce per-capita greenhouse gas emissions by 50%;
- increase the share of locally-sourced renewable energies to 20% of the overall energy mix in the local area;
- cut average annual agricultural, natural and forest land use by at least 50%;
- provide sustainable protection for more than 16,000 hectares of land designated for agricultural use.

The aim is to enable everyone who lives in or wants to move to the local area to have access to:

- a home that meets their requirements at every stage of their life and which is within their financial means;
- a job;
- suitable and convenient means of transport throughout the metropolitan area;
- local services that meet their needs, from childcare through basic schooling to higher education;
- areas for leisure activities and relaxation;
- natural spaces, big and small.

In accordance with these guidelines and at the beginning of this mandate, a first modification of the PLUm is being prepared. It aims to better take into account the evolution needs of ongoing projects and to facilitate the updating and correction of the document (adjustments resulting from feedback, integration of legislative or regulatory changes, etc.).

Coordinating urban development programmes in comprehensive development zone representing between 30% and 40% of new homes

Programmes in comprehensive development zones (ZAC), which fall under the responsibility of Nantes Métropole, enable local authorities to control land use, build necessary infrastructure, meet objectives in terms of social housing and affordable housing in line with Nantes Métropole's PLH 3 Local Housing Programme. The ZAC scheme also makes it possible to encourage architectural innovation, and architectural and environmental quality by imposing specifications drawn up by town planners, developers and local authorities.

In support of the green transition roadmap, Nantes Métropole aims to develop the use of wood and bio-sourced materials in order to reach a target of 20% of wooden buildings in the metropolitan area by 2025 and to increase this target to 30% in public development operations (ZAC). A call for expressions of interest in wood and bio-sourced materials has been launched in partnership with Atlanbois to support a number of innovative projects and promote the development of the sector. It has not been implemented due to changes in the teams in certain municipalities of Nantes Métropole.

Major undertakings in 2020 included:

- Doulon-Gohards Comprehensive Development Zone (ZAC) in Nantes, involving the design of the global draft proposal for public spaces and the Water Act dossier, initiation of preliminary studies for the Louetrie school, allocation of 3 urban farms to operators and design of the operational headquarters, launch of the first consultation with developers on the Gohards Nord site (200 housing units);
- Mellinet Comprehensive Development Zone in Nantes: continuation of development work on the site, the school and three real estate projects comprising 250 housing units with a strong focus on the low-carbon aspect of construction; arrival of the first residents on the site in spring 2020 (NMH program); start of work on the project house and commencement of consultation workshops on the temporary furniture for Place Chapus in late 2020;
- Champ de Manœuvre Comprehensive Development Zone in Nantes: entry into its operational phase with the development of several roads, including the central courtyard and the mall. Construction of the new school started at the end of 2019 for an opening in September 2022. Work on the first homes began in mid-2020 and the first residents of this new neighbourhood will arrive during 2022;
- Boulevard de la Baule Comprehensive Development Zone in Saint-Herblain: the new urban and traffic-calmed Boulevard Charles Gautier is unveiled with the completion of the development of public and green spaces. A new neighbourhood life is emerging, bringing together local residents, new inhabitants and users. The aim is to encourage new forms of mobility and a mix of uses and populations. If the Charles Gautier boulevard is green and peaceful, it is also active, useful and pleasant. As for the regional health centre, the site now hosts a number of activities, including the Sourdille ophthalmological institute, since the end of 2019. The diversity of medical expertise is at the heart of Santé Atlantique's identity;
- Coeur de Ville Comprehensive Development Zone in Les Sorinières: sited on nearly 2 ha of brownfield in the heart of the town centre, this urban renewal project involves the construction of 185 housing units, the creation of a new retail spaces, a local supermarket and a new public square. The housing project on the south block made good progress in 2020. The first works on the new square will start at the end of 2021;
- Continued marketing for all operations: Western city centre and Métairie (Couëron), Les Vignes (Les Sorinières), Vallon des Garettes (Orvault), La Jaguère (Rezé), Les Ormeaux (Bouaye), Les Vignes (Les Sorinières), Les Perrières (La Chapelle-sur-Erdre), Le Verger (Carquefou), Erdre Porterie and Bottière Chénaie (Nantes), Rue du Moulin (Nantes);

- the Halvêque-Beaujoire-Ranzay urban renewal zone: a major metropolitan economic development site along the Route de Paris, the zone has been positioned as a major business hub as part of a strategy of rebalancing the expansion of the tertiary sector towards the East. The project focuses on the much-needed transformation of the two major shopping centres Paridis and Beaujoire into mixed urban districts around the Route de Paris, which will become the main focus of urban renewal in the zone. The industrial activities of the Haluchère-Batignolles district will remain as they are;
- The launch of several urban studies: the study of the conversion of the Joffre IUT site; the urban, economic and mobility planning study for the Route from Vannes to Nantes, Orvault and Saint-Herblain continued in order to define the urban renewal strategy for the artery from Beauséjour to Cholière-Marcel Paul. This urban planning study aims at the renewal of the route from a global perspective (no opportunity-based transformation) while affirming and consolidating urban, landscape and commercial quality on both sides of the route. It is linked to other public policies (transport, master plan for cycle routes). Scenarios for a guide plan are studied for each of the sequences;
- An urban strategy and planning study is being carried out in the district around the Atlantis shopping centre with the aim of defining the conditions needed to establish an urban centrality in the area. As such, it involves a thought process on the future of this district in order to determine an urban development strategy and enable renewal in the medium and long term.

In 2019, new agreements with the ANRU (National Agency for Urban Renewal) also came into effect in the metropolitan area.

- Bottière Pin-Sec Comprehensive Development Zone in Nantes: start of work on the heart of the district (partial demolition and redevelopment of the shopping centre). Launching of the restructuring and extension works of the Urbain le Verrier school (Pin Sec sector). Continuation of pre-operational studies on public spaces, the redevelopment of the Souillarderie Basinerie Becquerel sector and the public facilities centre. Continuation of studies prior to the creation of a third-party centre in the heart of the district. Opening of the project house in September 2020;
- Grand Bellevue Comprehensive Development Zone in Nantes and Saint-Herblain: this urban renewal project extends over 61 ha and should enable the creation of approximately 1,000 housing units. A health centre, a sports facility and possibly a small-business cluster are expected soon. The project manager has been appointed: Devillers et Associés. Preparation work is currently underway on the draft proposal;
- Nantes Nord global project: preparation of the impact assessment and preliminary studies for the rehabilitation of the Champlain and Québec towers (500 housing units), design of the global draft proposal for public spaces, allocation of the nursing home block and 70 housing units, and preliminary studies for the creation of a small-business cluster on Bout des Landes-Bruyères;
- Dervallières in Nantes: the project is part of a new ANRU agreement on a regional scale. The development of public spaces around the Grand Watteau is scheduled to begin at the end of 2020 for delivery in the summer of 2021. In the continuity of the redevelopment of the Grand Watteau, launch of a study and NMH reflection on the rehabilitation of adjacent buildings in the Lorrain de la Tour sector. As part of the development concession for the Place des Dervallières, the project management team of MAP Paysagistes / Ville Ouverte / A2I Infra was selected in 2020.

Nantes Métropole is also working on other city policy priority districts in cooperation with the relevant municipalities:

- Pleasure boating in Orvault: approval of a master plan as part of a dialogue-driven process with the district's residents and stakeholders;
- Breil in Nantes: continuation of urban studies on the future of the Breil square;
- Château Rezé (Rezé): urban renewal sector of this urban policy district, commitment of pre-operational studies to finalise the AVP phase (1st half of 2021).

Key figures in 2020

- 42 scopes of operations defined for metropolitan housing development projects.
- 17 scopes of operations defined for economic development projects.

URBAN CENTRALITY IN THE METROPOLITAN AREA

The heart of the metropolitan area continues to grow. Nantes Métropole has set out to imagine a new centre for the conurbation, to build a European city that is natural, vibrant, human-scale, convivial, compact and influential in both cultural and economic terms.

This renewed ambition is reflected in the intensification and multiplication of major projects, as well as in the central place now given to the river and nature in the city: a commitment that systematically nourishes and structures the intentions of the local authority, developers and project managers. The vision for the urban core is all-embracing now, but it is careful to cultivate the distinctive features of each space and district. The aim is to build a pleasant everyday living and working environment for the city's residents and employees, to be enjoyed by the residents of the conurbation and discovered by its visitors.

In time, 300 hectares of Nantes' urban core are to be reinvented. To achieve this, the area has many advantages, such as an ambitious mobility policy currently under consideration that includes three tramway lines, and a project to widen the Anne de Bretagne Bridge by 2026.

The Île de Nantes

The Île de Nantes is undergoing a major urban development project to create a vibrant centre featuring a host of urban amenities, including housing, businesses, shops, public facilities and local services. It is being led by Nantes Métropole and implemented by the SAMOA.

The development of the Île de Nantes is currently concentrated on its southwestern part. As part of this move, the wholesale agricultural produce market (MIN) was relocated in March 2019, to be followed by the railway goods sidings in 2022. Eventually this zone will be the site of an authentic city district that will house the future University Hospital (CHU).

A team organized around Jacqueline Osty and Claire Schorter has set out the agenda that will govern the broad guidelines of the urban project for the next 20 years, including the deployment of a system of parks and landscape features, a new structure for travel, and diversity in ways people are able to live, work, study, entertain and cultivate themselves. This development is based on the manifesto for a sustainable island: one of shared interests, mobility, resilience, and well-being (promoting health and well-being through nature, rest and solidarity). The urban project fully participates in the two markers that are the ecological transition and equality.

The new République district, which includes the urban development of 20 hectares and for which the first building permits were submitted in 2020, will form the cornerstone of a new urban mission: to provide a natural environment that offers future residents and employees a unique and gentle quality of life.

Eventually, the south-west of the island is expected to house:

- nearly 1 million m² of built space;
- 350,000 m² of structuring facilities (future university hospital and related programmes, FAC, EFS, etc.) and approximately 20,000 m² of local facilities (school group, gymnasium, eco-point, community premises, etc.);
- 360,000 m² of housing (at a rate of 6,000 housing units for 12,000 new inhabitants);
- 230,000 m² of offices, businesses, services and shops.

New university hospital: end of 2020, earthworks were able to start. New temporary bypass roads have been built.

Facilities: a flagship project was delivered in 2020: the merger of the "Pierre Landais" social restaurant and the "bains douches" in the creation district - renamed "espace Agnès Varda". In mid-2021, the "5 Bridges" will be delivered (a unique space for homeless people open to the general public). In addition, the first "2020" school was opened to the west of the trade union centre

(Josephine Baker School). A school complex with 14 classrooms and a gymnasium have already been planned for the République district.

The Creative District: the rehabilitation of the Halles Alstom site is well underway and continued in 2020 with the delivery of the university centre dedicated to digital culture. This will be followed by a hotel for innovative companies and a food court.

La Prairie-au-Duc: this district to the west of the Île de Nantes continues work on a development project for the south of the Boulevard de la Prairie-au-Duc. Many local businesses have been able to open.

New flagship operations: continue to be developed in this fragmented area following the example of work carried out at the exit of the Senghor bridge. This involves the creation of 500 housing units, new free spaces created, opening up new access routes to the Loire for the Beaulieu district.

New public spaces: the future parks in the southwest are currently being studied. They will support the city in dialogue. Temporary developments, are currently being considered to accompany the University Hospital project and the development of the south-west.

The historic city centre

The Feydeau-Commerce zone is taking shape

An emblematic site in the historic centre of Nantes, the Feydeau-Commerce sector is undergoing a major makeover as part of a massive project to restructure the route from the station to the Loire. The redevelopment of this 27,000 m² area will provide generous pedestrian spaces and enhance the presence of nature in the city. Work has been underway since 2018. The first significant achievements were delivered in 2020.

The ongoing transformation of the historic centre

- **Transformation of the site of the former prison**

Construction work on the "Révélations" project continued in 2020 and the first deliveries took place at the end of 2020: the "Descartes" public car park in November and the first homes in buildings A and C in December. The 251-space public car park will provide new parking options in the immediate vicinity of the shopping centre.

Eventually, the site will be entirely transformed into a new micro-district with access to the city and nature. It will consist of 154 housing units, including 77 social rental units (including 12 inclusive housing units), a 40-seat multi-purpose childcare centre, and a restaurant with an auditorium around a central landscaped area open to the public during the day.

- **La Tour Bretagne**

This ageing high-rise building has suffered a number of malfunctions and a level of obsolescence. However, its emblematic character and central location have prompted strong interest from developers and investors wanting to carry out a full regeneration and major restructuring project on the building.

Before embarking on a project of this size, the trade union council, made up of the main owners of the Tower, including Nantes Métropole, agreed to launch an exploratory technical feasibility study for the development of La Tour Bretagne. This initial exploratory approach carried out in 2019 was continued in 2020 with additional diagnostics and more in-depth technical studies, with a view to organising a project management competition in 2021.

Other miscellaneous projects

- **Approaches to the town hall**

The year 2020 marks the completion of the urban study conducted on the surroundings of the town hall since 2017 with the design office "La fabrique urbaine". The objective of this study was to propose an operational version of the Conservation and Development Plan (Plan de Sauvegarde et de Mise en Valeur, PSMV) covering three blocks. After having made a diagnosis, the study proposes differentiated scenarios of reconstitution or not of the urban blocks according to the urban grid prior to the bombings of the Second World War. A steering committee meeting held on 6 November 2020 made it possible to present scenarios for urban reconfiguration in this sector and to validate the guidelines.

- **La Cité des Congrès**

In 2019, the Metropolitan Council approved the plans and funding allocation for the Cité des Congrès extension project with the launch of a competitive call for project management tenders. The project will be carried out as part of the wider urban redevelopment of the Fleurus site. The urban and landscape guidelines are in line with those of the "Loire au Cœur" project master plan and the Canal Saint-Félix zone plan. The launch of the competition has been suspended following the 2020 municipal elections.

- **The transformation of the "Notre dame du Bon Conseil" site**

The local authority is working to support the private initiative project. It concerns the programming of the project and the development of public spaces adjacent to the operation. The challenge is to conclude an urban partnership project (PUP). After a break, this work was restarted in September 2020.

- **The renovation of the Dobrée Museum**

Nantes Métropole is closely involved in the progress of this project, led by the Loire-Atlantique Departmental Council, specifically on the issue of the interface between the museum site and the surrounding public spaces. A community dialogue process was initiated at the end of 2020 for the development of Place Jean V and Rue Voltaire, both adjacent. The aim is to draw on the expertise of the inhabitants, local residents and users of the square to provide input for the project management team, Agence Paume, which has been selected by the local authority to define the development programme for the public spaces during the first half of 2021.

- **Boosting a new commercial offering in the heart of the city**

Construction work continued in 2019 on a vast commercial unit of more than 1,300 m² in a contemporary building that will also house a number of residential units in the Fleuriot de Langle zone. A major retailer moved into the building in 2020.

Other potential sites have been identified and are now undergoing economic, urban and property research by Nantes Métropole, aided by Assistant to the Contracting Authority (AMO), with a view to developing or improving their current commercial offering.

Petite-Hollande - Bords de Loire: the "Loire au Cœur" project

Architects agence TER have been tasked with creating a vision for the transformation of Nantes' city centre on the northern bank of the Loire, to be completed by 2030, between the Saint-Félix canal and Bas-Chantenay. Achievements include:

- **coherence plan:** following the workshops and community dialogues (2018-2019), a version 1 of the coherence plan (reports by themes and communication mapping) was developed. The intentions of the Loire au Cœur project have been set out in terms of landscape, public spaces, mobility, economic appeal, heritage and uses (sports, the Loire, events, etc.). Communication material will be produced in 2021;
- **Quai de la Fosse:** preliminary studies of public spaces to accompany the DNL project between the future Memorial tram station and the CCI. Studies that will continue into 2021;
- **Anne de Bretagne bridge:** support in the definition and programmatic intentions of the Anne de Bretagne bridge competition (2021-2022);
- **Saint-Félix canal:** launch of preliminary studies on the Favre and Malakoff quays around the canal;
- **Cité des Congrès:** a definition study for the extension of the Cité des Congrès in the Fleurus sector. Launch of the competition suspended following the municipal elections;
- **Gloriette Petite-Hollande:** following the decision of the Metropolitan Council of October 2019 to validate the program and the budget for the work, the definition of the technical and environmental studies has been extended. With a view to closing in January 2021, a preliminary consultation was carried out before the launch of the preliminary design of the public space.

Other major urban centrality projects

The new Nantes train station

- The new mezzanine will open to the public in November 2020, doubling the passenger capacity.
- After the space occupied for 3 years by the station construction site is freed up at the end of 2020, the development of the northern public spaces will be completed with the construction of the "Cyclo Station" (for September 2021).
- On the south side, the demolition of former SNCF buildings will continue until July 2021. The redevelopment of public spaces began in September 2020 and will be carried out in successive phases, while maintaining access to the Station for all modes of transport, until 2024. The future building housing the multimodal interchange is in the study phase for work from 2022 to 2024.

Pré Gauchet / EuroNantes - Station Comprehensive Development Zone

The Pré Gauchet Comprehensive Development Zone has been awarded to Nantes Métropole Aménagement, accompanied by a project management team led by Gérard Pénot (Atelier Ruelle). The project continued to progress at a steady pace in 2020 with interim deliveries of phase 3 and preparations for phase 4:

- the delivery of block 1G (102 housing units and 4,500 m² of business premises), block 5B (public car park with 500 spaces, 2,500 m² of business premises and 61 housing units) and public spaces on Boulevard de Berlin and Rue Marcel Paul;
- the launch of the construction of the 3D block (6,000 m² of business premises) and the 4B block (5,000 m² of housing and 16,000 m² of business premises with in particular the establishment of UCPA) and the preparation of the construction site of the 8F block (61 housing units);
- the appointment of a project manager and the continuation of studies for the Saupin Ouest block (Nordic pool, 1,000 m² of business premises and 5,000 m² of housing units with a high proportion of wood);
- the appointment of the operator and the launch of the design-build consultation for the ABC block of the multimodal interchange (bus station, taxi ranks, bicycle parking, car park and rental services and 11,000 m² of business premises).

Bas Chantenay

Created on 28 June 2019, the Bas-Chantenay Comprehensive Development Zone is managed by Nantes Métropole Aménagement. It covers only 104 ha out of the 152 ha of the development concession. The programme of the Comprehensive Development Zone includes 90,000 m² of business premises, a volume of 1,000 housing units and 10,000 m² of public facilities. The urban project management is entrusted to a consortium headed by the RRA agency, with Bernard Reichen as architect and town planner.

The studies and works for the year 2020 are as follows:

- Carrière sector:
 - delivery and opening in July of the staircase designed by François Delarozière, attached to the cliff: this equipment links the Schwob square in the upper part with the Jardin extraordinaire below;
 - continuation of studies on the development of public spaces. Continuation of the studies for the transformation of the CAP 44 building into the Cité des Imaginaires;
- Dubigeon sector:
 - the N2 river shuttle line will be put into service in January, with the installation of a pier at the Docks de Chantenay site;
 - continuation of the urban studies on the sector. Continuation of the studies for the restoration of the black crane landing stage;

- **Electric factory sector:** start of the public space works and the building of the "Business centre around the maritime, nautical and river sector". Nantes Métropole Aménagement is the project manager for this 6,000 m² building of offices and prototyping workshops which will be delivered in 2021 and will accommodate 400 employees;
- **Bois-Hardy sector:** further environmental studies on the sector, before resuming a second phase of consultation on the future of this inhabited hillside in 2021;
- **All sectors:** 2020 was also a year of continuing preparatory land negotiations, of supporting industrial transfers while maintaining the production vocation, of supporting transfers for offices or housing. A global environmental strategy approach has been initiated, involving all Nantes Métropole departments. The issues of mobility, soil renaturation, resistance to climate change, conservation of the ordinary heritage, and the footprint of processing activities are all themes that have prevailed in the approach (association of all stakeholders in a second phase).

Pirmil-les-Isles

Created in June 2018, the Pirmil Les Isles Comprehensive Development Zone (ZAC) is managed by Nantes Métropole Aménagement, supported by a project management team led by Frédéric Bonnet (OBRAS). This operation will act as a laboratory for the green transition in the metropolitan area by developing new approaches to city-making on a large scale, such as a greater concern for water and biodiversity, the extensive use of climate-regulating trees, energy-efficient and low-carbon planning and construction by working from the design phase with the circular economy and alternative materials to concrete.

The development objectives include the enhancement of the landscape qualities of this site on the banks of the Loire, the enhancement of the green belt based on the presence of water, the safeguarding of the existing residential fabric and vibrant business zones with a high concentration of jobs. The ambition is to propose new districts to live, work and visit in contact with the Loire and the centrality. In practical terms, this will involve providing a good level of urban services that are all designed in keeping with the concept of the "suburb", combining a mix of functions and a diversity of architectural and urban forms. Ensuring that the new districts are served by structural travel networks will be key to the project's success: the tramway is already present in Nantes (Pirmil) and planned in Rezé (Basse Île).

The two operational zones are Pirmil in Nantes and Basse Île in Rezé. The plans submitted as part of the schedule of work approved by the Metropolitan Council on 13 December 2019 include:

- approximately 240,000 m² of public spaces redeveloped or created, including the confluence park in Pirmil and the creation of a riverside park in Basse Île (4.2 ha of green spaces in Rezé and approximately 1.8 ha of green spaces in Nantes);
- 1,000 housing units created in Nantes "Pirmil" and 2,300 units in Rezé "Basse Île", of which 30% are social rental units and 25% are affordable housing;
- approximately 92,000 m² of floor space for businesses, offices and shops;
- approximately 8,000 m² of floor space for local public facilities in Rezé, including a school complex and sports, community and social facilities for young children;
- a location has been identified for a potential supra-municipal public facility.

The year 2020 saw the deepening of the preliminary technical studies and operational design of the Comprehensive Development Zone, with a fine work of sourcing and association of the development and construction sectors in order to encourage innovative processes in the consideration of environmental, social and economic issues. More than 80 organisations attended meetings on issues such as materials, services, mobility, soils and landscapes and operational facilities. The collaborative workshops suspended by the health crisis resumed remotely at the end of 2020.

CITY POLICY PROJECTS

City policy projects are structured around four cross-cutting issues:

- social cohesion;
- economic development, employment and training;
- urban renewal and quality of life;
- transitions.

These concerns are coupled with a particular attention to the methods of dialogue with the inhabitants and are consolidated within a global project which aims at the transformation of the districts. In particular, it is a question of taking into account the diversity of time scales (from the short to the long term) while facilitating the cooperation of local authorities, landlords and associations, in conjunction with the initiatives of the inhabitants. This was the case during the health crisis, which did not prevent many actions from being carried out in the neighbourhoods.

Four projects supported by the National Agency for Urban Renewal (ANRU)

The year 2020 was characterised by the entry into the operational phase of numerous worksites for the four global projects of Grand Bellevue, Nantes-Nord, Bottière-Pin sec and Dervallières.

Grand Bellevue

The Grand Bellevue comprehensive social and urban renewal project is now underway. Launched in the two municipalities of Nantes and Saint-Herblain, it aims to provide a response to the various challenges related to urban planning, the economy, social cohesion, quality of life and transitions in order to make Grand Bellevue a sustainable, active and popular district.

Highlights in 2020 included:

- the continuation of preliminary studies for the public spaces draft proposal;
- the continuation of renovation work by CDC Habitat Social for the rehabilitation of 265 social housing units on avenue Winston Churchill;
- the continuation of preliminary talks with the retailers of the Place Mendès-France with a view to their relocation or departure;
- the demolition of the Doubs line in Place des Lauriers and the start of work on the development of the Maison des Habitants et du Citoyen square and the flower meadow;
- the ongoing effort to rehouse families in the sectors of La Bernardière in Saint-Herblain and Lauriers-Bois Hardy and Moulins in Nantes;
- the opening of shops (pharmacy and bakery) as part of the Bel&co programme near the Tour du Doubs;
- the start of work on the multi-professional health centre;
- the continuation of the work for the implementation of a new sports complex.

At the same time, as part of the ANRU+ "Bellevue en transitions" initiative, the year was devoted to the development of projects led by associations: a small urban farm, a platform for recycling organic waste, the Bellevue alternative market, the Plan B third-party transition centre, all of which bear witness to the dynamism of the neighbourhood's associative fabric.

The first workshops for the Grand Bellevue educational city, involving educational actors, associations, parents and institutions, were also launched in the fall of 2020. An operation to provide digital equipment and support for families has been undertaken in this context. Finally, despite the difficulties related to the health context, the permanent conference continued its work on the issue of youth in Bellevue.

Bottière-Pin Sec

Nantes Métropole intends to continue transforming the urban, social and economic fabric of the Bottière-Pin Sec priority district. The objectives are to make the district a pleasant place to live that is attractive and accessible to all; to diversify the housing stock to meet each household's needs; to develop economic activity and boost employment.

During the year 2020, many projects continued, particularly in the heart of the district: restructuring of the commercial cells to accommodate Centrakor, preparation of the Cif project (80 housing units for sale to the general public and business units on the ground floor), definition of the temporary installation project for the Magasin du Réemploi, discussions with the Beau-Tiers Lieu collective to define the project.

The housing operations are in the preparation phase (rehousing of the inhabitants of 76 Bottière and Becquerel-Basinerie-Souillarderie, consultation with the project manager for the participatory housing project) or in the operational phase (self-help housing projects in the Pin sec sector).

The Maison du Projet opened in September 2020 on rue de la Basinerie, on the ground floor of a Nantes Métropole Habitat building slated for demolition, after a participatory development project led by the Compagnons Bâisseurs and the Agence Départementale de la Prévention Spécialisée (ADPS). Despite the context, the consultation process has been relaunched, particularly for the Parc du Croissant and the Nobel Mall. The reflection for the elaboration of a plan-guide for the games and gardens was initiated at the end of 2020.

The extension-renovation of the Urbain Le Verrier school started in December 2020.

In connection with the departure of several practitioners, the setting up of a health centre in the district has been discussed.

Lastly, in the context of the health crisis, a strong dynamic supported by associations has made it possible to assist residents, whether in terms of food aid, the digital divide or the summer offer. These are all projects that will be structured in the coming years.

North Nantes

Launched in 2016, the overall Nantes-Nord project was pre-planned through an integrated approach that combines actions on quality of living, economic development, employment and community life. Alongside this overarching requirement for social cohesion, there is a general aim for dialogue at all levels.

An urban project management team, led by the Germe et Jam agency, has been appointed and has begun in-depth studies, particularly on the project's green and blue framework.

The year 2020 was also marked by the preparation of the construction sites for the multi-professional health centre and the artisanal courtyard at Bout des Landes. Negotiations with shopkeepers for the demolition of the Boissière shopping centre have begun. The experimentation of the neighbourhood business centre, Cowork'in Nantes, was continued.

On the occasion of the "springtime of the global project", shifted to the autumn because of the health crisis, the Mobil'O project, a mobile project house, was put into service in order to promote information and partnership work for the inhabitants.

The rehousing of the residents of 8 Rue Champlain continued, while the rehabilitation work at 4 rue Champlain was completed, including an intergenerational housing project.

Dervallières

The Dervallières district is continuing its transformation on the basis of a master plan that is structured around the following objectives: getting around and finding one's way in the district, gathering and occupying open spaces, diversifying and improving the quality of the housing and services offered.

In 2020, an urban project management team, MAP/VilleOuverte, was appointed for the reconstruction of the Place des Dervallières. Negotiations with the retailers were concluded for the demolition of the burnt-out shopping centre. A public safety and security study was also undertaken.

Work to relocate households in the Lorrain sector of the Tower continued in anticipation of the combined renovation and demolition project planned for 2022.

A preliminary study for the definition of an urban farm project has been carried out, bringing together neighbourhood stakeholders, agricultural stakeholders and integration stakeholders.

Three other urban renewal projects

Château in Rezé

The aim of the urban renewal project is to make the Château:

- a pleasant and attractive place to live by strengthening the role of the Place François Mitterrand as an urban centre, diversifying the housing supply, increasing opportunities for socialisation to build community spirit and supporting citizen initiatives;
- a sustainable district as part of the green transition: the challenge is to enhance the green belt, promote soft mobility, renovate social rental housing to improve energy efficiency, improve waste management and support the stakeholders involved in the reuse sector;
- a welcoming and supportive district that offers public spaces and services while promoting social inclusion and access to rights for its most vulnerable residents and assisting in the process of urban transformation in dialogue with the inhabitants;
- a district that is accessible by all and for the benefit of all, that opens onto the city and offers uses that cater for all needs and ages.

An urban project management team led by Magnum was appointed in March 2020 within the framework of the Comprehensive Development Zone, allowing the undertaking of in-depth studies.

Plaisance district in Orvault

The overall project for the Plaisance district involves three actors: Nantes Métropole, Orvault Council and Atlantique Habitations, with the aim of improving the living environment of the inhabitants, the quality and range of the housing stock available to ensure greater social diversity, renovating public spaces and increasing the supply of public facilities and shops.

The year 2020 was marked by the demolition of the Trieux building.

Breil district in Nantes

An urban study has been undertaken on the heart of the district, within the urban mesh made up of Breil, Feyder, Coubertin and Primevères streets. The reflection was publicly launched at a meeting held in October 2019. This was followed, from November 2019 to January 2020, by an immersive phase in order to listen to the aspirations of the inhabitants and stakeholders of the district. The material collected was presented at a public event in February 2020 with a photo exhibition and workshops on models. A second post-lockdown feedback session was held specifically for several associations in June. All the contributions were summarized in a community dialogue booklet distributed to participants in November 2020. Several scenarios are now being developed.

TAKING ACTION FOR EMPLOYMENT AND INTEGRATION

Employment represents a major concern for inhabitants and is a key factor in driving social cohesion. As such, it constitutes a political priority for this term of office.

Over the past five years, salaried employment has been progressing in the Nantes Métropole area. In 2019, almost all industry segments had benefited from the upturn. Nantes Métropole has one of the lowest employment rates of any major city in France and is pursuing an employment and innovation policy that is socially-aware and partnership-driven. The aim is to enable all of the area's residents to benefit from this improvement, with special attention given to those facing the greatest difficulty in finding employment, but also to work closely with businesses to match the job supply with the demand.

Nantes Métropole mainly supports the activities of organisations dedicated to employment, such as the Local Area Association for Development of Employment and Skills (ATDEC - which combines the activities of the Maison de l'Emploi, the Local Plan for Integration through the Economy - PLIE - and the Mission Locale) and the École de la Deuxième Chance (E2C).

The work of the partnership-based observatory of employment and economic development in the Nantes metropolitan area

The year 2020 was marked by the COVID-19 health crisis. In this context, Nantes Métropole quickly set up a follow-up of the socio-economic situation of the local area, in particular via:

- **the Nantes Métropole employment/economy observatory, mobilised to monitor the health crisis.** The AURAN, co-pilot of the observatory, was specifically commissioned to carry out this monitoring and to inform the elected representatives and stakeholders of the local area in real time about the analysis of the crisis.
Several documents were presented and published to shed light on the situation in the metropolitan area. Among them, the [barometer of employment/economy of Nantes Métropole](#) (1st semester 2020), which shows a clearly weakened French and local economy. "Aeronautics, tourism, culture and events are all key sectors for the Nantes economy that have been durably impacted by the health crisis," the document stresses. It also states that "the economy is on life support" as the "rebound in private salaried employment in the third quarter of 2020 does not compensate for the losses incurred since the beginning of the health crisis";
- **the work of Compas on the fragility of priority neighbourhoods covered by urban policy.** Working for Nantes Métropole within the framework of a public contract, Compas (Coordination mutualisée de proximité pour l'appui et le soutien) provided a complementary socio-economic analysis of the priority neighbourhoods in crisis (based on elements collected during the first lockdown). The following have been highlighted:
 - the economic impact of the crisis, broken down into two barometers: the impact on household budgets and the impact on employment;
 - digital inclusion, also presented through two barometers: an index of digital disruption and an index of needs for access to rights;
 - the fragility of seniors, children and families;
 - health needs;
 - the dynamics of the local areas via the local area development index (IDT).

This work has revealed the vulnerabilities of priority neighbourhoods, which remain a central issue. Numerous presentations of this work have been organised for employment professionals, elected officials, management, municipalities and partners in employment and observation, or during a citizens' convention.

The Nantes Métropole CSR platform: co-constructing with companies committed to employment and responsible economic development

In 2020, Nantes Métropole continued its dialogue with companies in favour of employment, applying the roadmap for the development of CSR (Corporate Social Responsibility, defined in 2014). The roadmap itself coordinates the various actors involved in the economic development of the local area to engage SMEs and VSEs in coherent CSR approaches. The aim is to improve their social, environmental, economic and territorial impact within the framework of transparent and participatory governance.

Faced with the health and social crisis, CSR offers an appropriate response by encouraging the recovery and growth of economic players. In this context, its role is strengthened: it encourages even more exemplary management, employee protection and solidarity with the most vulnerable. It leads many responsible companies and associations to take immediate action with their employees/members and other suppliers.

The targets have been strengthened in 2020 to include:

- **Assisting SMEs and VSEs in the area in developing their economic, social and environmental performance**

In the context of the health crisis, the CSR platform has launched a page on its website ("Keys to action") which is fed by the partners. It lists and highlights responsible practices of companies and economic networks, in particular those that support the economic ecosystem (in particular solidarity solutions that have been developed in the local area and thanks to the economic players).

In-depth work has been carried out on the Parcour'RSE website and on its support offer to companies (based on 3 priorities: Understand, Be inspired, Act) to make it more visible and accessible for companies (flash diagnosis, solutions for public/private support, financing, training, etc.).

A toolbox (resulting from the work of thematic focus groups) has been initiated by the platform. It includes training and information materials produced with partners (Audencia, ADN Ouest, ATDEC, CPME, etc.) on various subjects: salary negotiations, responsible use of digital tools, the Welcoming Company scheme and the "responsible employer" brand. This toolbox is available as an open-source tool for all local players wishing to make progress on CSR issues and will be enriched by future focus groups.

- **Involving local players around CSR issues**

The 3rd edition of the "Social Change" event on 10 December was organised 100% remotely. A major event, its purpose is to encourage and raise awareness of CSR issues among the region's VSEs and SMEs, whether or not they are already involved in the process. It should be noted that most of the actions carried out within the framework of the health crisis have fed the editorial line and the contents of the "Social Change" event. In just three years, the event has become a must for professionals looking for innovation. This is a great opportunity to get inspired, to learn, to change your model and to act, for a responsible and sustainable economic development. Among the new features of the 2020 edition, devoted to resilience:

- a first in an exclusively digital format with a live broadcast and a digital application to access the day's program;
- the 2020 leitmotiv: "My company is committed AND takes action".

Cooperation with "1001 Évènements". The aim is to bring together energies and coherence for the production of events on CSR and ecological transition in a difficult context for economic players. The post-COVID crisis that the event industry is going through is a time to rethink organisational models, in line with the new expectations of the public and local authorities to make eco-events more widespread.

Continuation of the RSE Nantes Ambassadors Strategy (ownership tools) in the local area to facilitate spin-offs in the local area.. In 2020, the challenge was to involve large

companies. More than 30 companies have signed the "Major Companies" charter and have become ambassadors for the Nantes metropolitan area's CSR platform.

The "Welcoming Company" scheme. The COVID crisis is increasing the social and territorial inequalities of the people furthest from employment. More than ever, we need to continue the actions to be carried out to involve companies in the region in terms of employment, particularly for the region's priority groups (senior citizens, QPV, etc.). The aim is to make the "Welcoming Company" scheme a lever for CSR in the region. In 2020, more than 40 companies applied for their "welcoming company" certificates. This scheme, [rolled out in particular via a dedicated internet page](#), will be reinforced in 2021.

- **Promoting local stakeholders' CSR achievements nationally and internationally to enhance appeal**

The Nantes Metropole CSR Platform is active at European level through the Eurocities network, but also, since 2019, through **the European URBACT programme "Cities4CSR"** carried out jointly with 10 other European cities. Under this programme, the CSR Platform will be joining a multinational platform for the exchange of best practices and mutual assistance for the next 2 years. In this context, it will set up a local CSR observatory, with a view to achieving the 17 sustainable development goals by 2030.

- **Positioning of the CSR platform in the post-crisis process**

In this unique year, two issues have emerged:

- capitalising on the impetus of the CSR platform and its recognition to pursue and enhance the responsible economic development of the local area;
- challenging the role of the CSR platform in a context where the entire economic development policy must become responsible.

To think collectively about a sustainable and responsible economic recovery, it is advisable to rely on the CSR platform, to strengthen its unifying role (including with stakeholders such as the consulars who are active members), its capacity to produce debates, proposals and to incubate collective operational innovations (e.g. responsible digital module, employer brand, teleworking, etc.). The next topics already proposed by the actors include threefold accounting, culture and sponsorship.

It should be noted that Nantes Métropole is ranked 1st in the Oïkos Foundation's ranking of the most CSR-friendly cities in France. This ranking is based on the number of companies with more than 200 employees in the city centres and suburbs of the 10 most populated urban areas in France. To identify the companies involved, the study compiled a list of employees with a CSR function based on LinkedIn searches and by associating the CCIs, regions and cities. This survey has a double objective to analyse the homogeneity of companies' CSR commitment throughout the country and to encourage cities to provide more support to companies in this process.

The main conclusions of the ranking: on average, 9.04% of companies in the top 10 French cities are committed to CSR. This increase can be explained in particular by the publication of the PACTE law in 2019 and the awareness resulting from the health and economic crisis. The Oïkos foundation specifies in its press release that CSR "has become unavoidable as it irrigates all sectors - social, industry, digital, health, security, transport, agriculture...".

39% of companies with more than 200 employees in the Nantes metropolitan area are involved in a CSR approach (ahead of Lille, which has a ratio of 24%). There is a strong disparity between cities, with a 33% gap in the ranking (Nantes 39% - Lille 24% - Bordeaux 19% - Marseille 19% - Nice 13% - Lyon 12% - Toulouse 10% - Rennes 9% - Paris 5% - Strasbourg 6%).

Key figures in 2016

- **The CSR platform since the website's creation in June 2013 (<https://rse.metropole.nantes.fr/>) :**
 - more than 1,500 visitors / month in 2020;
 - 155 CSR best practices and " CSR minutes";
 - 159 offers in the local area listed on the website of the platform within the framework of Parcou'RSE;
 - 60 CSR ambassadors (members of the platform) split into six groups;
 - 11 thematic workshops held since the launch of the platform.
- **NégoTraining**, a support system on professional gender equality launched in 2017:
 - more than 2,500 women trained since the launch of the module;
 - 64% of participants said they were more confident in negotiating their salary after the workshop;
 - 98% of participants recommend #NegoTraining to a colleague or friend.
- **Social Change :**
 - more than 1,100 visitors in remote sessions throughout the day, 25% of whom were VSEs and 25% were SMEs;
 - more than 200 speakers/experts between the village and the proposed contents;
 - mix of stakeholders: 50% women and 50% men;
 - 100% local companies to testify.

Services to young people in the metropolitan area through the activities of the Mission Locale

The Mission Locale offers personalised support for young people under the age of 26. It helps them in searching for a job, but also in finding solutions to everyday hurdles such as accommodation, mobility, health, etc. Mindful of the need for a locally-accessible service, it has ten sites open to the public in Nantes and 18 information points outside Nantes.

Highlights in 2020 included:

- 8,772 young people supported in their career path, including 3,518 at first-line reception centres;
- 990 young people started a training course;
- 4,836 young people given job placements, including 388 in work-study programmes and 556 in corporate immersion programmes for 470 companies;
- the ongoing Garantie Jeunes scheme helped 502 young people in the metropolitan area (+25% compared to 2019) who took a dynamic and intensive 12-month course to prepare for the job market. 23% of these young people were from City Policy priority areas. 55% of them benefitted from work experience and/or training or a period of immersion in a company;
- a particular focus on young people living in priority districts through targeted actions:
 - support for young women in single-parent households: 81 young women received support- 24% are in employment and 14% in training;
 - specific support for young people on work-study programmes from the QPV: 90 young people advised and 74% in sandwich courses, conventional employment or training;
 - integration through employment: 324 young people supported by the Local Mission benefitted from an IAE course, 24% of whom were from City Policy priority districts.

The Fonds d'Aide aux Jeunes

The Fonds d'Aide aux Jeunes, or youth support fund, provides individual financial assistance for urgent needs or one-off projects contributing to the social and professional integration of young adults in great social hardship, aged between 18 and 24. It caters for people who cannot call on their family for support with building their future, either because they have no contact with or are in conflict with their family, or because of their family's financial precarity prevents from providing material support for achieving self-sufficiency.

- In 2020, 906 young people from the local area received support to the total value of €280,969, corresponding to 1,541 aid requests. This aid is mostly to cover basic living costs (78.5%), training (7.8%) or housing (8.1%). 40% of the beneficiaries are women, 83% are under the age of 23 and 37% have a level of education lower than the CAP or BEP (secondary-school vocational training certificate/diploma).

Services for young people through the activities of the Loire Estuary École de la Deuxième Chance, now the Nantes-Saint-Nazaire E2C

In 2020, the celebration of the 10th anniversary of the creation of the E2C (École de la Deuxième Chance) Nantes Saint-Nazaire could not take place under the right circumstances. The lockdown related to COVID-19 has forced the teams to set up a distance learning course to maintain pedagogical continuity (2 to 3 half-days per week). Based on the experience acquired during the first lockdown, the FOAD (open and distance learning) offer was quickly expanded.

In 2020, 159 young people were supported at the Nantes site, 40 of whom were continuing their studies. Due to the reduced capacity, fewer young people were welcomed.

The rate of trainees living in a priority district of the city policy is 33%. The most represented districts are: Bellevue (28%), Bottière - Pin Sec (17%), le Breil (11%).

The average age is 21. It has decreased by half a year compared to 2019, in particular due to the intake of 16-18 year olds.

Despite the context, there are still many concrete job and training opportunities (73% for the Nantes site). This result was made possible, among other things, by the solid network of companies that continued to support and accompany us.

The services offered by the Maison de l'Emploi

Based in 8 premises shared with the Mission Locale, the Maison de l'Emploi employment service caters for all sections of the population, helping them in their search for or return to work in partnership with the Pôle Emploi (French job centre), business networks and associations. To do this, it co-develops projects and initiatives with business networks in order to bring the supply of jobs in line with demand for employment. It also carries out strategic workforce planning (Provisional Employment and Skills Management - GPEC) initiatives in high-growth industries and sectors in order to anticipate and adapt to changes in the labour market.

Highlights in 2020 included:

- 11,886 visits to the eight cyber-job centres for 7,950 users (795 unique visitors / month on average); 1,840 new sign-ups;
- 89 workshops (on job search techniques, e-inclusion, etc.) for 284 people.

The range of services offered was also expanded to include:

- the continuation of recruitment actions, i.e. 137 dedicated actions (83% took place in a priority district). The initiatives reached 1,331 participants; 1,245 people took part in 122 pre-recruitment initiatives (in "tailored" format) which resulted in 51% of them being hired;
- support for sectors on the importance of strategic workforce planning for priority sectors such as digital technology, personal services, cleaning, agri-food, market gardening and agriculture, the energy transition, logistics transport and elderly health. In 2020, 52 actions were carried out to improve the appeal of professions. The recruitment actions concern sectors in demand (digital, transport, elderly health, etc.). Innovative courses were offered

to acquire entry-level skills (i.e. digital technology and elderly health): 2 programmes with a total attendance of 390.

Removing barriers to employment and preventing discrimination in employment

Nantes Métropole is actively involved in combating discrimination and promoting diversity and equality: It strives to facilitate the pathways to employment for the inhabitants who are furthest from it by acting, at its level, on the obstacles to employment, the securing of pathways and access to employment for those who are furthest from it, in particular the inhabitants of the City Policy Priority Districts (QPV).

The "language pathways" scheme implemented in conjunction with the City of Nantes' Mission for Equality took shape in 2020 with:

- 187 people who were able to benefit from a language assessment and orientation towards a suitable training course via the language assessment centres at the Maisons de l'Emploi sites;
- maintaining and adapting distance language workshops for professional purposes, bridges to support and professional qualification schemes, for the inhabitants of priority districts. This support has enabled us to maintain links with the most vulnerable inhabitants in this period of health crisis;
- the experimentation of a new linguistic action aimed at the professional world to allow people without qualifications to access training leading to certification in the personal assistance sector, a sector that has a strong recruitment need.

In addition, actions aimed at removing obstacles to mobility have been continued within the framework of the Platform for Mobility and Employment, through support for local association operators, including a social driving school, solidarity garage, low-cost vehicle rental and training in independent mobility.

Nantes Métropole is also working to combat discrimination in employment by supporting actions aimed at employers, economic players and employment professionals: awareness-raising actions for recruiters through the LCD Game (Mozaik RH), a "resource" group run by the Maison de l'Emploi to support more inclusive recruitment practices, and training for professionals who can act as gateways to employment.

Securing the path to employment for the most vulnerable and priority groups

Nantes Métropole promotes access to employment for the inhabitants of the City Policy Priority Districts (QPV) through support for projects deployed in the districts. In 2020, 31 projects were implemented for the benefit of the inhabitants concerned: preparatory workshops for interviews, regaining self-confidence, development of job search skills, sponsorship actions, discovery of professions, job-dating, etc. In addition, enhanced support is offered to young people looking for a work-study program and to young women in single-parent situations.

Finally, within the framework of the Local Contract for the Reception and Integration of Refugees (CTAIR), signed between the State and the City of Nantes for 3 years, Nantes Métropole has co-piloted a working group aiming to provide tools and training to intermediary employment professionals who accompany migrant populations. This group brought together the partners of the public employment service, the structures of integration through economic activity and the territorial employment operators (ATDEC). For this first year, the following were implemented:

- a diagnosis-action of the needs for professionalisation of the stakeholders- intermediaries of employment. The diagnosis has led to a number of ideas and proposals for action that can be deployed over the three years of the contract;
- the experimentation of a first training session "Accompanying migrants towards employment". This training course was co-constructed, on the basis of the diagnostic elements, in partnership with Alliance Europa (University of Nantes). 20 professionals were able to benefit in 2020.

Specific support for residents struggling to find employment

Within the framework of the **Local Plan for Integration and Employment (PLIE)**, a scheme co-financed by the European Social Fund (ESF), ADTEC coordinates workforce integration programmes and offers guidance and support to those facing the greatest difficulty in finding work until they are in lasting employment. The PLIE's priority is to provide the best possible response to the needs of the general public in order to ensure their successful integration into the world of work.

In 2020 (as of 30/09), highlights included:

- 1,507 people supported (of whom 77% were educated to CAP/BEP-level or lower, 27% were senior citizens aged 50 and over and 36% were residents of priority districts);
- 642 people benefited from a work contract in a regular environment.

With the support of the ESF and Nantes Métropole, innovative initiatives have been carried out to prepare the public for employment, particularly through simultaneous measures to remove the obstacles linked to poor mobility and lack of French language skills. In association with the association AGIRabcd, a proposal was made to teach the highway code to audiences not fluent in the French language. 24 sessions of 2.5 hours were held twice a week. They helped to install the basic vocabulary of the highway code and to prepare the public to take the test.

In 2020, Nantes Métropole also continued to support 40 **integration via employment organisations**. Every year, these bodies help to provide on-the-job experience for 3,300 people who are having difficulties finding work (around 1,076 full-time equivalent employees).

Nantes Métropole's involvement in this sector can be summed up in three roles:

- as a financier (with an earmarked budget that has remained constant for over 10 years);
- as a principal (by carrying out workforce integration hours on public contracts);
- and as a facilitator (through its presence in workforce integration bodies in the local area and on the steering committees for various structures, and through project ownership assistance who acts in favour of workforce integration hours, etc.).

Integration through procurement: leveraging the social clause

Since 2004, Nantes Métropole has used its public procurement contracts to encourage companies to create jobs and foster integration through work. It includes socio-professional integration clauses, stipulating that a portion of work must be set aside for people on integration schemes in the building, public works, green spaces, environment, cleaning and service sectors. This initiative is a means of promoting jobs for people who face the greatest difficulties in finding employment. It also provides a means of supporting employability organisations through economic activity and employer groups working to promote integration and qualification.

The initiative has a dedicated 6-person team (5.4 FTE) and provides support to purchasers and companies. More specifically, this involves defining and implementing clauses, getting employment and integration professionals together, and assessing initiatives. Nantes Métropole is taking part in the scheme with 74 contracting authorities.

Since 2014, more than 5,500 people have been given an employment contract on nearly 3,500 contracts, thanks to the workforce integration clause. Of these, 25% have gained access to a work-study qualification. This was made possible thanks to the mobilisation of 4.2 million hours of integration (74 principals) carried out by more than 700 companies and structures of Integration through economic activity. On average, 600,000 hours of integration are generated each year thanks to this system.

DEVELOPING A SOCIAL AND SOLIDARITY-BASED ECONOMY

The social and solidarity economy (SSE) is a driver for local cohesion, social innovation and economic buoyancy. It accounts for nearly 37,000 jobs across the conurbation (16% of private-sector employment).

As part of its action plan to support the social and solidarity economy, and through a new seed fund, Nantes Métropole is supporting research and development in innovation and the development of projects, which in turn inform public policy.

Implementation of the ESS 2020 Roadmap

The year 2020 was marked by an unprecedented health crisis that strongly impacted economic actors, including the ESS workforce.

The "ESS Nantes Factory" scheme launched in 2017 to support project leaders with FONDES, Ecosolies, Crédit Municipal de Nantes, ADEME and the Caisse d'Épargne Bretagne Pays de la Loire, has supported **13 projects in the start-up phase**.

The scheme's core missions were pursued:

- support projects in their initiation phase, but also ease project owners' and entrepreneurs' access to other sources of financing in the project start-up and development phases;
- facilitate guidance and support for project owners and entrepreneurs;
- pay particular attention to projects' progress after their start-up phase.

In addition, a dedicated service offering for the COVID-19 crisis was implemented in 2020. All of the SSE Nantes Factory partners have mobilised to provide personalised support to all of the structures monitored by the scheme, directing them towards the aid most suited to their situation. In this framework, highlights include:

- the setting up of two webinars to support entrepreneurs during the crisis and help them anticipate the recovery. Two main themes were discussed:
 - the cash flowplan: an effective tool for managing a business;
 - the question of the business model and its commercial action plan.
- the organisation of the event "And we tomorrow" (17 participants) in partnership with Les Ecosolies, France Active Pays de la Loire and led by the firm;
- the creation of a specific Local Support Initiative (DLA) for five organisations on the theme of "developing my commercial strategy - communication strategy";
- the implementation of a specific DLA on the theme of "developing my management tools";
- the launch of the prefiguration study of the reuse sector with SSE actors;
- the assessment of the 2016-2020 social and solidarity economy roadmap and launch of the co-construction process for the 2020-2026 metropolitan social and solidarity economy roadmap.

A hub for social cooperation and innovation: The Ecosolies Solilab, a symbol of the area's economic diversity

Constructed on a surface area of 9,000 m² and comprising 4,000 m² of buildings on Rue de Saint Domingue on the Île de Nantes, the Solilab hub has been operational since February 2014.

The hub is one of the first facilities for multi-business initiatives and innovation in the social and solidarity economy in France. Managed by the Les Ecosolies association, this Local Area Business Cooperation Hub aims to give the social and solidarity economy a visible presence in the heart of Nantes' eco-metropolis project. It consists of:

- a hub to promote cooperation and the creation of non-relocatable businesses and jobs;
- a multi-business service offering to develop social entrepreneurship, the creation and consolidation of social enterprises, and support to develop the skills of SSE organisations in the metropolitan area;
- a place for initiative, experimentation and innovation. It offers an array of tools for the promotion, consolidation and economic development of projects in the social and solidarity economy, including a business incubator, affordably-priced premises and shared services for start-ups, an event venue, a reuse/recycle shop and a solidarity-driven canteen.

The involvement of the Ecosolies, whether in the consultation on crisis management or through the sustainable recovery plans, was illustrated in 2020 by:

- participation in the COVID-19 crisis unit with the Nantes Factory social and solidarity economy partners, in the consultation of economic players and in the Nantes Metropolitan Council's sustainable recovery plan;
- contribution to the regional social and solidarity economy strategy;
- the continuation and adjustment of support activities, from welcome and orientation meetings to the emergence programme (Pop Corn) and launch (incubator);
- the labeling of the Ecosolies Initiative Factory via AVISE and the development of new partnerships for this program (AG2R - La Mondiale, Malakoff-Humanis);
- the structuring of the training offer (obtaining the Qualiopi certification), the enlargement of the training offers around the reuse professions, the partnership with the CNAM within the framework of a Programme d'Investissement d'Avenir (PIA) to qualify the trainings and to experiment new courses from 2021;
- the study for the implementation of an acceleration offer for the local area.

A few key figures for Solilab in 2020:

- 326 members, including 234 organisations and 94 individual members.
- 138 structures renting permanent workspace at the Solilab.
- Pop Corn: 34 business ideas tested during 2 Pop Corn sessions, bringing together 35 participants by videoconference.
- Incubator: running a programme of 19 training workshops for 9 projects supported in 2020. Entry of 7 new projects by the end of 2020.
- Events restricted by the health situation: the Braderie cancelled, the Folie des Plantes maintained with a limited number of exhibitors (12% increase in turnover), the Other Market went online with 23,000 online visitors.
- 1st "Other Market" version online in 2020:
 - 63 selected exhibitors, 51 participating exhibitors (83%), 1,500 references;
 - 743 orders (€75 average order);
 - overall turnover: €55,600 (or 1/7th of the 2019 turnover), €2,136 average turnover/day;
 - turnover per exhibitor: €3,500 for the highest turnover and €1,089 for the average turnover;
 - platform traffic: 23,975 visits.

BUILDING HOUSING FOR ALL

With 656,275 inhabitants (as of 2018), Nantes Métropole has consolidated its position as the French city with the sixth-highest rate of population growth. In order to house its new inhabitants, Nantes Métropole is implementing a proactive policy which originates from the Local Housing Programme (PLH).

The metropolitan settlement policy

To facilitate access to social housing stock and make it easier for tenants to move house, in 2013 Nantes Métropole established an Intermunicipal Housing Conference (CIL) which brings together the 24 municipalities, the social landlords, the French State and "Action Logement", a major stakeholder in social housing in France. In 2016, the conference was expanded to include associations operating in housing.

For the records, on 17 October 2016, the Metropolitan Council approved the strategic priorities issued by the metropolitan CIL. This document is structured around the following three issues: streamlining households' access to housing; balance in the local area; equal treatment of all households and equal access to social rental housing. The guidelines are set out in two documents (approved by the CIL) that define the objectives, the partners' commitments and the work programme for 2017-2022:

- the Inter-municipal Allocation Agreement merges the Inter-municipal Collective Agreement, the Territorial Balance Agreement and the Metropolitan Rehousing Charter, and was approved by the Metropolitan Council on 10 February 2017 following a favourable opinion by the committee responsible for the Local Action Plan for the Accommodation and Housing of Underprivileged People (PLALHPD) and the Prefect;
- the "partnership plan for managing the demand for social housing and applicants' requests for information" (PPGDLSID), approved by the Metropolitan Council on 26 June 2017 following an opinion by the municipalities and the Prefect.

The Equality and Citizenship Act of 27 January 2017 provided further details about the definition of the housing allocation policies implemented by the Intermunicipal Housing Conferences (CIL). Although the documents that make up the Nantes Métropole CIL are in keeping with the spirit of the Equality and Citizenship Act, certain details have been added, mainly in relation to the objectives of restoring balance in social occupancy.

In addition, following joint work within the Nantes Métropole CIL, the framework documents (strategic priorities and the inter-municipal allocation agreement (CIA)) were also amended (giving priority to the action sheets), then presented and confirmed in January 2018. They were approved by the Metropolitan Council in December 2018. The Partnership Plan, which requires a prior opinion from the municipalities and the State, was approved in 2019.

Following the CIL of March 2019, working groups conducted in 2019 and 2020 looked into solutions for housing of priority groups and rebalancing occupancy in priority districts (along with the development of specific allocation strategies adjusted to reflect the changes in each of these districts).

Also noteworthy in 2019 was the launch of an active rental trial, which raises the visibility of social housing (ESH, OPH) available in 8 of the City Policy priority districts. By doing this, the aim is to make it easier for housing seekers to apply for one or more housing units. To encourage households to settle in these districts, the trial is based on the concept of "choice", meaning that households settle there by preference and no longer by default.

The achievements in 2019-2020 were reviewed at the CIL plenary session on 16 December 2020, validating the work programme for the year 2021. It foresees the continuation of the current working groups on priority groups, settlement strategies in priority districts and the evaluation of active

rental. The programme extends the activities of working groups to ensure that the rating system for demand and allocation flow management is implemented.

The strategic priorities of the Local Housing Programme (PLH) for 2019-2025

Following the Metropolitan Council meeting of December 2016, the years 2017 and 2018 were devoted to drawing up the Draft PLH for 2019-2025, including assessment and challenges and strategic priorities. More specifically, these two phases involved:

- statistical analyses of socio-demographic trends in Nantes Métropole's housing stock and in the housing markets, in collaboration with the urban planning agency AURAN;
- studies into specific points (housing for more disadvantaged residents, housing for people with disabilities);
- meetings with housing partners over a series of 10 round tables;
- meetings with the municipalities of the metropolitan area.

The Draft PLH was finalised in a Metropolitan Council meeting of June 2018, after favourable opinions from the 24 municipalities and the French Government. It was then definitively approved by the Metropolitan Council in December 2018.

This third PLH confirms the quantitative targets set by the housing policy and seeks to respond to the new challenges facing the metropolitan area, through qualitative solutions that reflect the diversity of residents' current and future needs. To this end:

- in the existing housing stock, the emphasis was placed on providing more energy-efficient homes (5,000 homes are renovated per year) that are also better suited to the households' expectations, particularly by adapting homes in both the private and the social housing stock to population ageing and disability;
- new-build housing stock must address unmet needs. The programme sets an annual housing production target of at least 6,000 new units per year;
- the PLH reasserts the intention to diversify the offering of new homes to cater for residents' residential paths. This will mean upholding the PLH's annual quality targets (2,000 social housing units, 500 subsidised-rent homes, 700-800 homes for sale at subsidised prices) and the creation of new "housing products" to fill out the range of offerings and streamline access to housing, including accessible social rental housing and help-to-buy housing (250 per year);
- in order to meet the housing needs of elderly and disabled people, a range of solutions are needed, from adaptation of the existing housing stock to the production of suitable dispersed or grouped housing units;
- a housing policy prioritising the most vulnerable households must be put in place. Priority given to "housing above all".

Sustained production has exceeded the targets of the Local Housing Programme

The Local Housing Programme (PLH) set a target for the construction of 4,500-5,000 homes per year between 2010 and 2016. These targets were exceeded: the average construction from 2010 to 2015 was permission for 7,500 homes per year. The amended PLH, approved for the 2014-2018 period, had set a target of 5,500 to 6,000 new homes per year, which represents a moderate, steady rate of production. NB: between 2014 and 2018, permission was given for an average of 7,300 new homes per year.

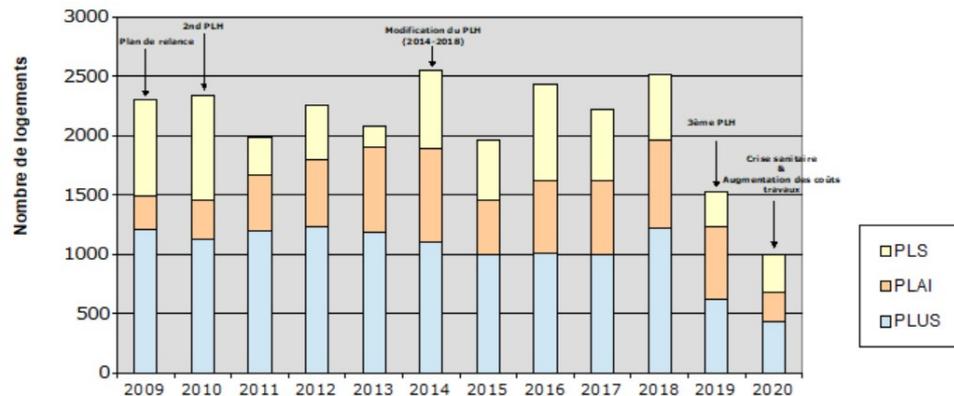
The new PLH confirms a target of 6,000 new homes per year for the period 2019-2025. The metropolitan area is marked by a downturn in the production of new housing for the years 2019 and 2020, with permission given for 6,610 homes in 2019 and 4,100 homes in 2020.

A strong and sustained supply of social rental housing

In 2020, 683 social housing units for rental were financed under the PLUS (social housing loan) and PLA I (subsidised rental housing loan for integration) schemes, including the PLUS and PLA-I ANRU schemes (a clear downturn compared to 2019). This represents a financial volume of €6.445 billion in direct aid for Nantes Métropole.

In all, an average of 1,564 social housing units for rental have been funded per year since 2010 (of a targeted 1,800 to 2,000 homes per year).

Programmation de logements sociaux et locatifs abordables de 2009 à 2020



Source: Direction Habitat

Affordable accommodation for all

Low-income rented social housing loans (PLS)

This type of loan is used to build dedicated accommodation for students, elderly people and disabled people as well as family homes.

311 PLS homes were funded in 2020 (of which 69 % were dedicated housing units and 31% were family homes).

Since 2010, the annual average number of approved PLS rental housing units is 505 homes, compared with an initial target of 500.

Vocations	PLUS	PLAI	PLUS ANRU	PLA I ANRU	PLS	TOTAL	%	PSLA	OFS
Logement familial	371	149	41	73	184	818	82 %	215	45
Logement familial - personnes âgées	22	1	0	0	0	23	2 %	0	0
Logement familial - insertion	0	0	0	0	0	0	0 %	0	0
Logement familial - ASV /pers. Hand	0	16	0	0	0	16	2 %	0	0
Logement familial - jeunes - de 30 ans - ELAN	0	0	0	0	30	30	3 %	0	0
EHPAD / résidence autonomie / résidence services	0	0	0	0	83	83	8 %	0	0
Foyer pour personnes handicapées	0	0	0	0	14	14	1 %	0	0
FJT / Jeunes salariés / Apprentis	0	0	0	0	0	0	0 %	0	0
Résidence étudiante	0	0	0	0	0	0	0 %	0	0
Structure d'accueil (maison relais...), d'insertion, GDV	0	10	0	0	0	10	1 %	0	0
TOTAL	393	176	41	73	311	994	100 %	215	45
	683								

Source: DH - Parc Social

sAffordable home ownership

This scheme allows average-income households (based on PSLA income thresholds) to find affordable accommodation within the Nantes Métropole area, with housing prices of between €2,400 and €2,500/m² compared to free market prices that can exceed €4,000/m². The PLH sets a target of 800 housing units per year.

Since 2010, an average of 494 affordable housing units have been authorised for construction every year. The affordable housing units planned under the current Comprehensive Development Zone make up the bulk of production of units for affordable homeownership.

These housing units are produced by social actors (social and cooperative backers) thanks to the PSLA loan and reduced VAT in the "City Policy priority districts" and within a 300-metre surrounding perimeter.

In addition, the Loire-Atlantique land ownership organisation (OFS), "Atlantique Accession Solidaire", supported by the department, CARENE, Nantes Métropole and 14 social housing associations and low-rent housing cooperatives, was set up to develop a new, more attractive and sustainable range of affordable housing (with separation of land and buildings).

In 2020, 270 affordable housing units were approved: 45 OFS housing units and 215 PSLA housing units. This has been bolstered by the sell-off of social housing from the stock available in the metropolitan area, for a total of: 202 units

Meeting specific housing needs

A proportion of the rented social housing and affordable housing financed in 2020 addresses specific needs:

Housing for students/young professionals

- 30 affordable family PLS housing units for young people under the age of 30 have been approved in the Val d'Or project, located on Route de Rennes in Orvault.

Housing for the elderly

- Reconstruction of the Houssais care facility for elderly dependants (EHPAD) in Rezé, approved for 83 PLSs.
- Two developments consisting of family housing units intended primarily for the elderly, with a range of services and entertainment provided (known as ASV housing). Of particular interest is the creation of 8 social housing units as part of the Persagotière programme in Nantes, with Cémavie providing the services.
- 15 social housing units as part of the Val d'Or programme in Orvault.

Housing and accommodation for households with persons with disabilities

- 14 places in homes for people with disabilities have been approved in Sainte-Luce-sur-Loire, Avenue des Cèdres, in conjunction with the ADAPEI association.
- 10 inclusive housing units approved by the CD44 call for projects were funded in the Val d'Or (Orvault) programme in conjunction with the APF and Ariane Epilepsie associations. A community hall will accommodate public events throughout the programme.
- 6 inclusive housing units were funded in the Amir programme on the Ile-de-Nantes with NMH. The public (people with disabilities or elderly people) has yet to be defined.

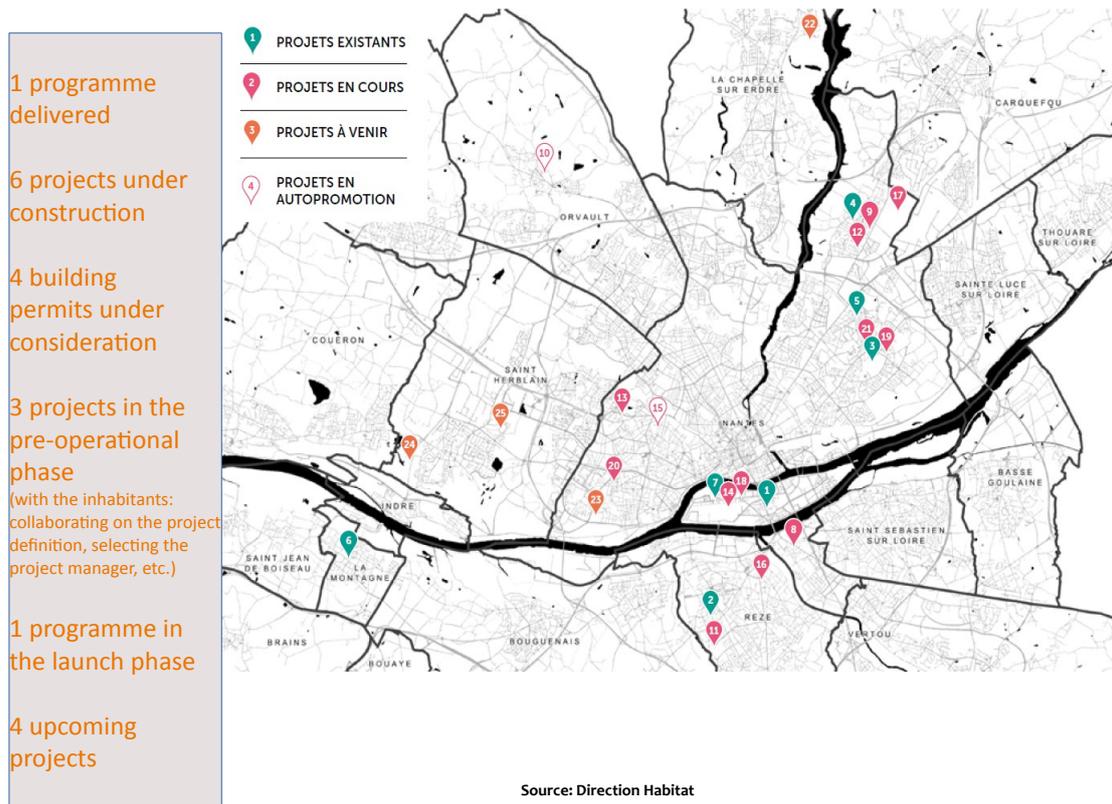
Housing and accommodation for disadvantaged households

- 2 additional housing units were financed within the Schuman social residence managed by ADOMA in Nantes.
- The State has temporarily provided 12 housing units located in the Moncey barracks, Rue Stéphenson in Nantes, to accommodate 39 refugees, with management entrusted to Habitat 44 and France Horizon. 8 dwellings have been financed as part of the State budget delegated to Nantes Métropole.

The Metropolitan Participative Housing Initiative

The Metropolitan Participative Housing Initiative was launched in early 2016. Since then, some 20 sites have been identified. Its aim is to develop a new way of living in housing by involving future occupants in the process, from the design of the programme to its commissioning and eventual management of the premises and communal areas.

An initial programme resulting from the initiative was delivered in 2020. Another two programmes will be delivered in the first half of 2021. A total of 6 projects are currently under construction: 4 have a building permit under consideration, 4 are in the pre-operational stages, 3 of which involve groups of residents.



Upgrading the existing private and social housing stock

Since 2010, education and awareness-raising initiatives have been carried out to meet the challenges of improving the energy efficiency of existing buildings and halving greenhouse gas emissions by 2030. As part of this drive, Nantes Métropole has developed an initiative to help co-owners living in residential blocks undertake energy-efficiency renovations. The initiative relies on a team of energy transition policy officers who develop a project methodology for co-owners' associations and help the co-owners to identify the financing options available to them.

Nantes Métropole also manages housing improvement operations (OPAH), with the aim of preventing unsanitary living conditions and energy insecurity and ensuring that rent for private housing remains accessible.

Following the adoption of the energy transition roadmap, 2018 saw the launch of a new comprehensive system of financial assistance, "Mon Projet Renov", with an allocated budget of €56m for the 2018-2025 period.

In application of the renovation objectives from the energy transition roadmap (included in the Local Housing Programme (PLH)), the year 2020 was marked by:

- the launch of consultations, following the decisions of the council of 22 June 2018 and the committee of 31 January 2020, aiming to provide monitoring and coordination of two new General Interest Programmes with work beginning in December 2020, on a metropolitan scale:
 - a **“Households” Mon Projet Rénov General Interest Programme**, the coordination of which has been entrusted to SOLIHA (it follows on from the "Habiter Mieux" General Interest Programme completed in 2018) with the aim of renovating 3,400 homes over a period of 5 years covering various aspects: combatting energy insecurity, combatting substandard housing and home healthcare;
 - a **“Residential block” Mon Projet Rénov General Interest Programme**, which Citémétrie is responsible for coordinating. This scheme, which is aimed at residential blocks wishing to undertake an ambitious energy renovation project, provides support for the Energy Transition policy officers, particularly with regard to the financing of the work. The aim is to intensify the mobilization of small residential blocks (particularly those managed on a voluntary basis) by supporting the trustees in the financial engineering of work projects and by strengthening the social support of ANAH households (landlords and occupants). The objective is the energy-efficient renovation of at least 750 housing units in residential blocks per year, i.e. 3,750 housing units over 5 years, and to support 100 to 150 residential blocks.
- the launch of a pre-operational study on implementing a system to deal with struggling residential blocks for "Les Rochelets" in Nantes. This study follows on from the Operational Programme for the Prevention and Support of Residential Block (POPAC) conducted at Bellevue, which revealed the dysfunctions of this building complex;
- the improvement of the existing social housing stock, to support the new objectives of the Local Urban Planning Scheme (PLH). A grant for the energy-efficient renovation of social housing stock was introduced in July 2019 for the years 2019 and 2020:
 - in 2019, four energy renovation projects received subsidies in the municipalities of Orvault, Rezé and Nantes, for 328 housing units;
 - in 2020, seven operations were financed for a volume of 770 housing units in the municipalities of Nantes, Vertou and Saint-Herblain.

Key figures in 2020

- 8 districts involved in the "active rental" trial.
- 683 housing units financed through PLUS (social housing) and PLA-I (assisted rental) loans.
- 311 housing units financed through PLS low-interest loans.
- 215 housing units approved through PSLA social lease-ownership loans.
- launch of the first programmes of the "Atlantique Accession Solidaire" land agency: 45 housing units under a "Bail Réel Solidaire" ground lease via the "Atlantique Accession Solidaire" land ownership organisation have been approved.
- 987 housing units have benefited from grants for the improvement of private housing, including 718 for work projects.

HOUSING-RELATED SOCIAL SUPPORT

Nantes Métropole is active in providing housing-related social support. Through the Housing Solidarity Fund (FSL) and the "Housing First" plan, it provides individual assistance to tenant households in social or private housing who are facing difficulties in accessing or staying in housing.

The Housing Solidarity Fund (FSL): an essential tool to help people stay in housing

As a result of the Notre Act, metropolitan areas now qualify for the FSL as of the 1st of January 2017. This tool of the local housing programme (PLH), which forms part of the "energy transition" roadmap, aims to:

- prevent and address the circumstances of people who are unable to access and stay in housing due to financial difficulties.
- support the most vulnerable households in terms of energy needs and prevent problematic situations;
- become a major tool for solidarity encompassing the residents of all 24 municipalities of the metropolitan area.

In 2020, new rules of procedure for the FSL were implemented. They allow for more effective consideration of the situations of household and their needs, for improved prevention.

This change has been widely publicised to all professionals involved in accessing and maintaining housing.

In view of the health crisis, a support system for tenants in precarious situations (risk of rent arrears) has been set up in collaboration with the various institutional stakeholders and landlords.

The Housing Solidarity Fund (FSL) in 2020 represents:

- 4,558 households assisted (+3.57% compared to 2019);
- the already effective impact of the new rules of procedure, which promote:
 - greater access to the FSL (6% of households assisted);
 - direct referral by households (12% of requests);
 - a significant increase in aid for unpaid water and energy bills (approximately 20%);
 - a more effective response by the FSL, which allows for a more significant settlement of rental debts.
- a slowdown in aid for access to housing, linked to the health crisis and the intense pressure on housing in the Nantes metropolitan area;
- exceptional COVIS aid: 1,128 households in metropolitan France benefited for an average amount of €700. Most of the households that received this assistance had never sought help from the FSL. These are mainly people whose resources (income from activities) have fallen sharply as a result of the health crisis.

Home energy-saving visits (Slime): consolidation of actions and partnership dynamics

The Slime (local response service for energy management) aims to strengthen the fight against energy poverty by offering free social and technical diagnostic visits to the homes of the most vulnerable metropolitan households with energy-related problems. As a complement to financial assistance, the Slime provides a better understanding of the energy challenges facing the housing stock in the region.

Targeted communication actions and partnerships (with the municipalities of Nantes Métropole) have been rolled out to make households aware of the scheme. 324 home visits were made to 241 households in metropolitan France. An evaluation of 60 households showed that the scheme was well received. However, improvements are expected in the implementation of the recommendations, particularly when it comes to carrying out work in the home.

Housing First

"The plan for housing first and the fight against homelessness" is a national public policy that is being pursued and to which Nantes Métropole has been committed since 2018 by signing an agreement to fast-track implementation.

In 2020, the exceptional health situation had a strong impact on the action plan and forced Nantes Métropole to adapt. Nevertheless, certain actions have continued to promote access to housing for the groups concerned by the "housing first" plan. This was the case through:

- partnership work structured around the "housing first" platform, which enables complex individual situations to be examined. In this context, a quantitative and qualitative analysis tool (shared with the integrated reception and orientation services (SIAO)) is used to gain a better understanding of the situations and backgrounds of homeless and vulnerable people with regard to housing in the local area. The objective of this multi-disciplinary social observation (6 sessions) is to more precisely identify the needs of the public and to adapt the measures adopted;
- coordination of the social monitoring actors, who are very much in demand due to the exceptional emergency needs;
- evaluation of the "housing first" scheme (outsourced service).

ACCOMMODATING ROMA COMMUNITIES

For many years, Nantes Métropole has been working to improve the conditions in which Roma communities are accommodated. Up until 31 December 2016, its efforts relied on an inter-municipal cooperation scheme (Syndicat mixte).

The legal obligations of accommodation are included within the framework of the 2018 departmental plan that was renewed for the 2018-2024 period at the end of 2018. The document also sets out the guidelines for housing of Roma communities who have settled in the local area and in helping them to claim their rights.

Improving the range of accommodation options with the creation of new sites

As of late 2020, the metropolitan area had 18 permanent sites with a total capacity of 228 pitches.

As regards the stopping place requirements identified in the departmental plan for accommodation of Roma communities, four sites remain to be built, providing an additional 27 pitches.

Highlights in 2020 included:

- the opening of permanent sites throughout the year to allow travellers to stay on site and thus limit the propagation of Covid-19. Only a few major maintenance operations were able to be carried out on an occupied site;
- the administrative closure of the Nantes Fardière site for repair following acts of vandalism.

Accommodating summer peaks

In summer, large groups of travellers (50 to 200 caravans) travel together to attend family or religious events. The State manages the area's accommodation facilities by coordinating and authorising the arrival of these large groups. Nantes Métropole contributes to this effort by providing a leased developed site on the Grand Port Maritime estate. It also manages access, waste collection and the mediation necessary to welcome the various groups.

Due to the health crisis, the Action Grand Passage association has announced its decision not to organise any trips for the summer of 2020. However, Nantes Métropole welcomed a group of about a hundred caravans on the dedicated site for two weeks.

Developing housing for settled Roma communities

Under its Local Housing Programme (PLH), Nantes Métropole is pursuing its commitment to developing suitable housing, more specifically for families identified in the departmental plan for housing members of the Roma community. As part of this commitment, Nantes Métropole launched an initiative in 2011 to find out more about the settlement locations and situations in the local area, and develop housing solutions that cater to the families' needs.

Highlights in 2020:

- 6 families moved into houses designed with and for Roma communities as part of a suitable housing project conducted in Nantes (Boisbonnière);
- five family rental plots handed over in rue Robert Schuman in Saint-Herblain;
- updating of the Departmental Action Plan for Housing and Accommodation for Disadvantaged Persons (PDALPHD) started with the Loire-Atlantique Departmental Council, including the housing of Roma communities.

Encouraging access to rights and citizenship

Achievements in 2020 include:

- residents' welcome booklet for each site finalized and distributed, and the link with the municipalities involved in this project consolidated;
- the partnership between the group of metal recovery operators from the Roma communities and the Rezé waste collection centre is being pursued for the 5th year, which is the final year in which Nantes Métropole will be supporting the group;
- social mediation initiatives are continuing on the City of Nantes' family plots and on the caravan sites of the conurbation (regular visits, individual support) including the Aparthé/friendly café initiative. A particular benefit of mediation is that it fosters social bonding and helps travelling communities to exercise their rights. This year, the service provider has been particularly active in providing information and listening, in light of the health crisis. Particular attention was paid to the economic situation of families and children's schooling.

Changing public perceptions of the Roma community

The SRI and ADGVC associations, which receive operational support from Nantes Métropole, are continuing their support initiatives. In particular, these associations work in connection with the "Tissé Métisse" event (a festival held each year at the Cité des Congrès) by coordinating a group dedicated to tackling prejudices against Roma communities.

TAKING DECISIVE AND CONCRETE ACTION FOR UNIVERSAL ACCESSIBILITY

Prompted by the Equal Opportunity Act of 11 February 2005, Nantes Métropole's disability and accessibility projects are structured around four strategic priorities that underpin the 2014 - 2020 action plan:

- facilitate universal access to public services;
- build an inclusive society;
- promote user-centric public action;
- revitalise and strengthen public policy.

These four strategic priorities lay the foundations for factoring disability into public policy, in terms of travel, public spaces, housing, employment, etc.

Supporting the consultation bodies of the Metropolitan area

The Metropolitan Universal Accessibility Commission (CMAU). This body, which was officially renewed on 2 February 2016, gives substance to universal accessibility by opening it up to the representatives of the elderly and the business community, in addition to the metropolitan vice-president and associations representing people with disabilities.

The CMAU holds three plenary meetings a year and meets regularly for special-focus workshops (on transport, public space, major urban projects, etc.).

The Universal Accessibility Group 24 (GAU 24). Bringing together mayors and elected representatives responsible for disability policy in the conurbation's 24 municipalities, the GAU 24's aim is to discuss and share metropolitan and municipal policies on disability and accessibility.

These bodies, which promote collaborative public policies, could not be held in 2020 due to the pre-election period and health constraints. They are due to be renewed in 2021.

Improving accessibility in the Metropolitan area

- **Ensuring pedestrian continuity with obstacle-free sidewalks:** in 2016, Nantes Métropole adopted an accessibility master plan (SDA). Over the course of 2016 and 2017, it mapped out 600 km of itineraries throughout the 24 municipalities and assessed their accessibility for pedestrians. It then drew up a multi-year programme of work to achieve full accessibility. 37% are already accessible to wheelchair users and 48% to people who are blind or visually impaired.
- **Offering universally accessible public and on-demand transport:** Nantes Métropole's public transport accessibility master plan (SDAPTC) was approved in October 2015 by the Metropolitan Council. In addition to investments in the main lines, a total of €250,000 has been invested each year in making the existing stops fully accessible. At the start of 2020, 100% of the vehicles, 80% of bus stops and 100% of tram stops were accessible, making Nantes' public transport network one of the most accessible in France.

The new 2019-2026 public service delegation agreement between Semitan and the Nantes Métropole, sets new accessibility objectives. For example, training for drivers on how to accommodate people with disabilities (developed jointly with the members of the CMAU) began in 2020. New Proxitan vehicles, better adapted to the service and running on CNG (a first in France) were delivered in June 2020, thus renewing the existing fleet. NB: the project for the Nantes train station and its immediate surroundings continues to be the focus of special attention and regular consultation with the members of the CMAU.

- **Accommodating users in adapted premises:** this forms part of the Ad'AP planned accessibility agenda, which concerns 83 public-access buildings (ERP) and facilities that are open to the public (IOP). More than €5 million has now been invested. 66 public-access

buildings have been made accessible, taking the overall accessibility of Nantes Métropole's building stock to 80%.

A guide to universal signage was also produced in partnership with users and associations, along with a catalogue of pictograms.

Nantes Métropole also supports associations that manage establishments, in particular by providing premises and plots of land.

Lastly, the equality mission is helping to change public perceptions by offering a range of simulation-based awareness-raising aids, such as a suit for simulating ageing, a wheelchair tour, various displays, etc.

Key figures in 2020

- 66 of the 82 public-access buildings and facilities open to the public (i.e. 80%) are now disabled-accessible;
- 80% of the TAN's bus and tram stops are accessible.

WORKING TOGETHER FOR EQUALITY BETWEEN DISTRICTS

The mandate that began in 2020 reaffirms the ambition of Nantes Métropole and the 4 municipalities concerned - Nantes, Rezé, Orvault and Saint-Herblain - with regard to the priority districts. This involvement has resulted in the creation of a vice-presidency for urban policy and urban renewal and the installation of deputies in the cities with this responsibility. This reinforcement in the local executive marks the desire for greater consideration of public action in these local areas. Increasing solidarity with working-class districts, rectifying dropouts, and supporting initiatives are the challenges facing the local authority.

The health context has highlighted the vulnerabilities of the inhabitants of these districts, which have been severely affected. Often more exposed to the virus, they are in poorer health, more likely to lose their jobs, and have difficulty keeping up with their children's schooling because they lack suitable equipment. However, the crisis has also demonstrated the remarkable capacity of associations to mobilize and implement concrete actions: creating and distributing masks, food parcels, computer equipment, care and surveillance actions and providing mutual aid to their more isolated neighbours, etc.

Involving and supporting residents and partners

Nantes Métropole's city policy and urban renewal mission involves the city's partners and supports residents of the priority districts by carrying out a variety of initiatives:

- managing and directing the city contract through participatory and open governance. 2020 confirmed the presence and involvement of inter-associative groups, community councils and landlords' committees in the steering committee, all of which had been heavily involved in preparing the amendment to extend the City Contract, but also in monitoring the actions carried out under its framework.
- the "city contract" call for projects, managed jointly by Nantes Métropole and the State, in collaboration with the relevant local authorities. Every year, the call for projects supports nearly 400 initiatives led by associations that are solidly rooted in the priority areas and help strengthen social bonding, education, integration, improvements to the quality of living and healthcare, etc. This year witnessed the confirmation of a trend from previous years on the digital component (fight against divisions and use of tools) with new projects and new stakeholders;
- the "Residents & Living Environment" support fund, which has made it possible to support the following projects, which were undertaken with the residents:
 - "Empowernantes" in Nantes Nord with a fresco on the floor of an open-air basketball court;
 - "Mobil Casbah" / Latypique Company, with an operation in Bottière Pin Sec ;
 - "Gueule de Bois" for the construction of a courtyard at Clos Toreau;
 - "Mobicréa" for the construction of a book kiosk in Bellevue;
 - "Solid'art international", with street art project produced around the rubbish bins in the public space in Rezé and the creation of a social space (picnic tables, etc.) in the communal "Amazonia Garden" in Malakoff.

Boosting local initiatives

Faced with the difficulties encountered (accentuated by the crisis), it has proved fundamental to take into consideration the energies and initiatives, situations and groups. It was a matter of putting ourselves at their service. The reactivity of the associations was remarkable in providing quick and efficient solutions to the essential needs of inhabitants who had no means of communication, were isolated and sometimes had difficulty understanding the health guidelines.

Supporting these initiatives to amplify their impact, the local authority provided logistical resources and drew on experience (temporary emergency solutions) to create and organise public action.

Two examples: food and digital:

- **the food crisis** that appeared at the beginning of the first lockdown led to the distribution of thousands of parcels, mobilising food production stakeholders and strengthening cooperation in the districts. The entire chain (from production to processing) was involved. Actions must continue.

These distribution operations have speeded up the reflections and projects already initiated regarding urban agriculture, for example the urban farm projects underway in Bellevue and Dervallières. The latter are part of the overall urban and social projects undertaken in the priority districts.

The project to create a collective purchasing group has come to fruition with "VRAC Métropole Nantes", developed to facilitate access to good-quality food for all. The association is developing the creation of purchasing groups in priority districts in Nantes Métropole by proposing products from local, organic and fair trade agriculture at attractive prices. Thus, VRAC allows residents to join a sustainable and responsible consumption mode, which relies on collective and local dynamics to address poverty and propose another approach to consumption, health and self-esteem. Other actions involving the processing of products and contacts with local producers are envisaged.

- **the digital divide** has become more acute as a result of successive lockdowns.

For inhabitants who are not equipped, "unconnected" or victims of "illectronism", there are serious difficulties in keeping up with their children's schooling, managing their jobs while working from home, maintaining links by e-mail, and safeguarding their rights with institutions when relations are increasingly carried out online. About a third of the inhabitants in priority districts do not have online access, are not equipped and do not use the Internet on a daily basis. This phenomenon was quickly addressed by the associations in order to find equipment and organise its distribution (mediation with the inhabitants in need). The local authority intervened to facilitate these exchanges, to look for partners, to collect equipment and to organize its distribution.

More than 1,000 computers were distributed during the lockdown, with priority given to families without a computer in conjunction with the educational success programme (with practical support if necessary). As a follow-up, a system that is currently being developed will be implemented comprising three inseparable components:

- an affordable connection;
- reconditioned equipment for less than €70 or on loan;
- to enable them to be independent in terms of basic usage.

TAKING ACTION TO ENSURE GENDER EQUALITY

As a driver of social cohesion at the metropolitan level, gender equality represents a real challenge for the local area. Nantes Métropole has committed to the issue by signing up to the European charter for gender equality in local life, following a decision by the metropolitan council on 13 April 2015.

This desire is reflected in the special importance given to the issue of gender equality, with a concerted effort to make tangible progress on the issue in the local area.

Within the framework of the public policies implemented by Nantes Métropole, measures were implemented in 2020 across various fields (employment, economic development, combatting gender-based violence, public procurement, human resource management, etc.). These projects are testament to Nantes Métropole's resolve with regard to achieving gender equality.

Encouraging female entrepreneurship in the local area

Nantes Métropole is committed to supporting female entrepreneurship by giving women the means to act. As it stands, just 32% of businesses in France are started by women. Faced with this inequality, Nantes Métropole has been rolling out a roadmap since 2017 developed as part of a citizen workshop with the Nantes council for gender equality.

Support for the network of stakeholders in the creation process simplifies the journey for women with creation or takeover projects: support, financing, accommodation and development. The "Osez entreprendre" scheme supports and finances the creation of businesses in the working-class districts of Nantes. In 2020, 162 people received support, 49% of whom were women.

Nantes Métropole has continued to support events in favour of women's entrepreneurship, which were maintained in 2020 despite the health crisis.

Supporting equal pay initiatives

The #NegoTraining workshops developed by the Nantes Métropole's CSR platform and led by the Audencia CSR Chair enable women to gain confidence and put into practice effective strategies to facilitate wage negotiations. In 2020, 8 workshops were held in the metropolitan area (in Nantes, Vertou, Saint-Sébastien-sur-Loire and Carquefou) and 10 workshops were held online, benefiting 339 women.

Supporting associations working to tackle violence against women

Associations working to combat violence against women benefit from financial support from Nantes Métropole. These organisations help survivors of domestic violence, family violence and incest or sexual abuse. They offer support services that enable women to receive the care they need and escape the cycle of violence, fear and guilt. These associations develop awareness-raising and information campaigns for the general public, professionals and institutions.

Equal employment, a central focus of HR management by the local authority

Issues of gender equality in the workplace are brought to the fore in the "Workplace equality, diversity and gender balance" initiative carried out in municipal and metropolitan departments. The internal charter circulated to all employees sets out its main objectives:

- promote equality for all within the departments;
- strive to reflect population diversity in the departments;

- go over and above the statutory protections, based on equal skills, to ensure effective gender equality in the workplace by promoting a better gender balance in jobs and at all levels of responsibility.

The Diversity - Equality dual certification scheme, which leverages all the relevant players, makes it possible for companies to commit to continuous improvement in order to guarantee and promote real equality for all. Following an on-site audit carried out by AFNOR Certification from 14 to 22 October 2019, Nantes Métropole, the city of Nantes and its Municipal Social Welfare Centre (CCAS) confirmed that they had obtained their diversity certification and had been awarded the “Gender Equality in the Workplace” mark of approval for the first time.

Some of the flagship initiatives conducted by the City of Nantes and Nantes Métropole with regard to gender equality in the workplace included:

- a recruitment guide: summarising the principles of non-discrimination and promotion of equality and professional diversity (non gender-specific job titles, diversification of recruitment pools, raising the awareness of recruitment panels on combatting stereotypes and prejudices, etc.);
- actions to promote careers in the local civil service (FPT), including job forums, work placements and apprenticeships: 374 people hosted on work placements at Nantes Métropole in 2018, including 150 women, as well as 31 apprentices, of which 9 were women;
- an in-house awareness-training group on gender balance and diversity, which runs sessions in the various departments (a total of 226 men and 77 women received awareness training in 2019);
- internal "equality at work" communication plan that relays the commitments and actions in terms of professional equality between women and men;
- measures to facilitate parenthood and ensure a better work/life balance (PGJE, CESU, special leave, etc.);
- implementation of the PPCR (career and compensation protocol) and the RIFSEEP (public service pay schedule), which help to reduce some of the inherent discrepancies in status. These measures to improve career development and pay have particularly benefitted female employees in categories A, B and C;
- creation in 2019 of the Equal Pay Observatory, which involves staff representatives in the process of diagnosis and subsequent measures taken to close the gender pay gap;
- establishment of the internal equality, diversity and gender equality advisory board, a forum for dialogue on equality issues that brings together trade unions, employee volunteers (50 members) and local government representatives. The proposals of the working groups (age management, prevention of sexist behaviour and gender-based violence in the workplace, etc.) are used to inform the HR policy;
- New "Equality at Work" training cycle, which trained 163 men and 155 women in 2019. Nearly 6,000 employees have been trained to date.

Selected figures and extracts from the 2019 Comparative Status Report

- 3,838 permanent employees working at Nantes Métropole, including 1,440 women. In the main technical division, the proportion of female employees has grown slightly, up 1 percentage point compared to 2017 (14% of women in 2019 compared to 13% in 2017).
- A total of 10,500 days of training given to 3,154 employees, of which 35.8% were women and 64.2% were men.
- Although pay gaps still persist, women's average monthly net pay has been increasing since 2014, while men's average monthly net pay has remained level since 2017.
- 25.8% of women and 4.3% of men are part-time, with an increase of 2.1 percentage points for women and 0.7 for men, compared to 2017.

ACCOMMODATING MIGRANTS FROM EASTERN EUROPE AND REDUCING ILLEGAL CAMPS

For several years now, the Nantes Metropolitan Area has been experiencing precarious housing camps occupied illegally by Romanian migrants. Since 2018, in collaboration with the State, the department and the 24 municipalities, Nantes Métropole has been piloting an urban and social project management initiative (MOUS) aimed at gradually reducing these camps and helping their inhabitants to integrate. The operational implementation of this MOUS initiative is delegated by public contract to the Saint-Benoît Labre association.

In 2020, the team of MOUS social workers conducted a comprehensive social diagnosis of households in the slums of La Jalière in Orvault and continued providing social assistance for more than 80 households from different camps. Globally, the social workers work with families on:

- finding more dignified housing (accommodation, halfway housing);
- assistance with professional integration (learning French, vocational training, finding a job);
- establishing and safeguarding rights (particularly with regard to social protection);
- challenges related to academic and educational inclusion.

As a result, 40 households have been granted access to housing or accommodation since 2019.

In addition to the MOUS, Nantes Métropole is supporting the municipalities to encourage the development of temporary housing spaces (temporary integration sites - TIT) in the form of funds for investment and subsidies for management costs.

Finally, it should be noted that the local authority has taken action to respond to social emergency needs, aggravated by the Covid-19 health crisis since March 2020. The actions included:

- guaranteeing access to drinking water for all camps in the city;
- mobilising to support community outreach activities in the slums, relaying health prevention messages;
- distributing food (during the first lockdown), masks and hygiene supplies.

Note: the issue of improving the living conditions of people in these camps will be addressed by the local authority during the current term.

CLIMATE PLAN AND ENERGY TRANSITION

Nantes Métropole has set a climate target of reducing greenhouse gas emissions by 30% per capita by 2020 compared to 2003 levels. By 2030, it aims to achieve a 50% reduction in GHG emissions. 2019 was marked by the adoption of the energy transition roadmap, which was drawn up in February 2018 following the Big Debate on Energy Transition, as well as the adoption of the Local Climate, Air and Energy Plan at the end of the 2018.

Nantes Métropole plays an active role in securing energy supply and keeping the associated costs under control. The authority is also continuing its efforts to improve its local educational and awareness-raising schemes, develop local renewable energies and improve coordination between its energy networks (electricity, gas and heating).

Translating the new Energy and Climate commitments into action

Nantes Métropole stepped up its "energy and climate" actions in 2019 with the adoption of the energy transition roadmap and the new Local Climate, Air and Energy Plan.

Operational applications of the roadmap

The 3 priorities of the energy transition roadmap have led to tangible achievements in 2019:

- an energy transition that benefits all inhabitants, particularly in terms of housing and mobility, including the continued renovation of houses and residential blocks, tackling energy poverty, intermodal transport systems, urban logistics, car-sharing, traffic-calmed city-centres, promotion of cycling, etc.;
- an energy transition that makes use of 100% of local renewable resources, such as compatible roofs, renewable energy, carbon-free urban planning, green oases, the circular economy, zero waste, bio-waste, sustainable food, etc.;
- a 100% citizen-led energy transition that empowers the city's residents to take action: 100 citizen labs, a range of initiatives in the municipalities, involvement of business stakeholders, open conference on energy transition, creation of the "Bureau de la Terre" single energy transition laboratory, etc.

In late 2019, around 20 resolutions were approved by the Metropolitan Council as part of the practical application of the roadmap, largely involving the funds allocated to energy renovation, travel and waste prevention.

The thirty or so local stakeholders of the Open Energy Transition Conference continued their work throughout 2020 in a virtual fashion, owing to the health crisis, i.e. seven videoconference sessions. This body will complete its evaluative monitoring work, focused on six roadmap commitments, in May 2021 with the provision of a deliverable.

In practical application of the roadmap, the "Bureau de Terre" has led to support for project leaders and put them in contact with resource organisations. About thirty individual meetings that have been organised throughout 2019 and 2020. Stakeholder networking events, entitled "energy transition lunchtimes" were also organised in 2019 (nearly 400 participants). They successively focused on useful roofs, business travel, "Citizen Labs" and the campaign against the wastage of food. A new schedule of these events on the themes of financial engineering, oases, the campaign against food poverty, as well as support for businesses in the ecological transition, was planned for the year 2020 (cancelled due to the health crisis).

Adoption of the Local Climate, Air and Energy Plan

Unanimously adopted by the Metropolitan Council in December 2018, the Local Climate, Air and Energy Plan (PCAET) addresses the shared challenges of reducing greenhouse gas emissions and building a city with more greenery while strengthening its resilience to extreme climatic events.

The PCAET consists of a "mitigation" phase, taken from the energy transition roadmap and aimed at reducing greenhouse gas emissions, and an "adaptation" phase to respond to the climate changes to come.

Its targets have now been integrated in the PLH and PLUm ("Air, Energy, Climate" Planned Improvement Guidelines). It should be noted that the planning officers of all the municipalities in the metropolitan area receive training to ensure that the challenges of the "adaptation" phase are translated into operational practice in urban planning projects.

2019 also provided an opportunity to take stock of the different thematic areas of the PCAET (mobility, energy, waste, urban planning, etc.) in preparation for the "Cit'ergie" certification in 2020. This PCAET management and evaluation tool has been used by Nantes Métropole for a number of years. The most recent full Cit'ergie audit, which was conducted independently based on a European reference system, dates from 2015 and will need to be repeated in 2020 to assess the progress made.

Ongoing initiatives to coordinate, advise and support citizens:

- providing information and advice to private individuals via the Energy Information Point run by the Association Ligérienne d'Information et de Sensibilisation à l'Énergie et à l'Environnement (ALISÉE) with 2 521 enquiries in 2019 (compared to 1,556 in 2018): 174 half-days at guidance centres with 98% attendance;
- 4 "energy and housing" forums held in Sainte-Luce sur Loire, Bouaye and Saint-Sébastien, and 7 workshops at the Eco-appart (Nantes);
- launch of a public challenge on the themes of reducing energy consumption, reducing waste and improving nutrition. Led by the local authority and coordinated by a group of associations, the energy challenge brought together 165 families in 19 teams who reduced their energy and water consumption by an average of 8% in the 2019/2020 edition; on the theme of zero waste, 215 households participated (800 people) and reduced their waste by 17.5% (less than 19 kilos per person per year); finally, on the food theme, 115 participating households (i.e. 350 people involved in the initiative) increased their purchases of organic products by 24% and their purchases of local products by 17% at a constant cost between the beginning and the end of the challenge;
- operational launch of the "Mon Projet Renov" comprehensive aid package to meet the "zero energy leakage area" target set in the energy transition roadmap. As a reminder, an annual budget of €7 million was approved to help finance the energy renovation of 1,000 homes per year (either detached houses or co-owned buildings). Low-income households are eligible for higher subsidies;
- the continuation of communication and information actions on our Mon Projet Renov scheme. Launch of the new metropole.nantes.fr/renover-logement webpages and eServices dedicated to applications for Mon Projet Renov subsidies for single family homes. The production of a MinuTE video on a low-energy certified house renovation project. The organisation of a "Rendez-Vous des Copropriétaires" get-together for co-owners in September 2020 with "La Copro des Possibles" and an online forum Déclic Copro on 5 December 2020. The year was also marked by the preparation of the future energy efficiency renovation platform of Nantes Métropole as part of the SARE (Energy efficiency renovation support service).

Supporting energy-renovation projects in houses and residential blocks

Nantes Métropole has continued its support for energy renovation in line with the roadmap. For example, standout events in 2020 included:

- the renovation of 474 private homes following the support of Nantes Métropole, including 210 low-energy housing units in residential blocks and 24 low-energy houses;
- the funding of 14 audits and 10 project management works in residential buildings and 76 audits in houses;
- the allocation of more than €1.5 million in Mon Projet Renov subsidies for studies or energy-efficient building work, in residential blocks or houses;

- support for 242 households on a means-tested basis, with Nantes Métropole subsidising ANAH aid to the tune of €1.4 million.

Overall outcome

Since 2011, 349 residential buildings (21,000 homes) have been supported by Nantes Métropole; 47 of them opted for energy-efficient renovation work, i.e. 3,600 homes renovated, including 1,750 low-energy homes.

Since the start of our support scheme for individual houses in 2018, 162 audits have been carried out, 32 houses have been renovated to energy efficiency standards and 437 houses renovated to non-energy efficiency standards.

Nantes Métropole, leading the way in France in energy-efficient renovation of residential blocks



Between 2015 and 2018, as part of the Investment for the Future (PIA) scheme - My City Tomorrow - Ecocity, Nantes Métropole backed 19 residential blocks that opted for energy efficiency building work (1024 energy-efficient renovated homes). The PIA report published in 2020 showed that Nantes Métropole was the French territory in which the most houses had been renovated to energy-efficiency standards, way ahead of other comparable French cities.

The energy renovation of social housing and tertiary sector housing stock

With regard to social housing, an initial aid scheme for renovation was adopted in June 2019, which includes a target performance on completion equivalent to the new official low-consumption level where possible (at least the improved low-consumption renovation level of 20%).

For tertiary buildings, an assessment to identify their consumption and target consumer typologies was carried out in 2019 by AURAN (Nantes Region Urban Planning Agency) as part of the Energy Master Plan. The goal is to mobilise the biggest consumers in order to build a strategy and the associated tools for 2020.

A voluntary public energy policy

Over and above the objectives of reducing greenhouse gas emissions, Nantes Métropole must ensure a sustainable supply of energy for its local stakeholders in the context of an energy sector in major upheaval. Its public energy policy focuses on two strategic priorities designed to bring about the energy transition.

Develop and optimise public energy services to best suit the needs of users, which will involve:

- strengthening energy transition goals;
- optimising the management of public electricity and gas supply services;
- continuing to develop affordable renewable heating;
- guaranteeing public services that meet user needs as closely as possible.

Reduce the energy footprint of the local area, consume less energy and produce more energy by:

- managing the technical and financial aspects of energy use in local government assets (leading by example);
- making existing housing more energy efficient;
- achieving the targets of the PCAET, including a local energy consumption mix consisting of 50% locally produced renewable energy by 2050 (20% by 2030) and halving final per capita energy consumption between 2003 and 2030.

To implement these two strategic priorities, the following steps were taken in 2020:

- the pursuit of a collaborative study with AURAN, the departments of urban planning, transport, housing, economic development and logistics for the development of an Energy Master Plan, to identify scenarios for the production of renewable energy (RE) and the reduction of local energy consumption that are needed to achieve the objectives of the PCAET;
- In 2014, Nantes Métropole continued its efforts at a national level to call for the creation of an energy organising authority, as a necessary first step to ensuring the success of the energy transition.
 - **electricity distribution**, i.e. its transport on low and medium-voltage lines from the substations (which interface with the transmission grid) to customers' electricity meters. Awarded to Enedis (formerly ERDF) by Nantes Métropole, this concession contract represents 3,231 GWh of electricity distributed for consumption, 209 GWh in production, a grid of 5,873 km, 380,937 supply points and more than 3,185 production points, of which 3,146 are photovoltaic;
 - **gas distribution**, i.e. its transport on low and medium-pressure networks from the source points (which interface with the gas network) to customers' gas meters. Awarded to GRDF by Nantes Métropole, the concession represents 3,703 GWh of gas distributed, a network of 2,337 km and 188,353 active supply points connected;

District heating networks are expanding

Three objectives:

- To provide access to safe energy for as many residents as possible at controlled rates: in 2020, more than 30,000 homes are connected to district heating networks; half of these are in social housing managed by the City of Nantes;
- to enable the development of locally-produced renewable energy;
- to reduce greenhouse gas emissions (68,000 tonnes of CO₂/year in 2020, i.e. 10% of the overall target of the Local Energy and Climate Plan).

Developments underway:

- **The Centre-Loire heating network:** under a public service delegation contract, renovation and extension work on the Centre-Loire district heating network has passed a milestone. At end-2019, the network stretched over a combined length of 85 km, an additional 60 km since 2012. The network is mainly fuelled by heat generated by waste incineration at the waste treatment and recovery centre at La Prairie de Mauves, then by wood and lastly gas as a backup option. When necessary, the Malakoff district heating plant (30 MW wood-burning plant) is supplemented by the Californie plant, the gas-fired section of which has been in operation since end-2016. The new wood-fired Californie plant was brought online in spring 2019. The network currently serves 17,900 homes and a number of facilities, with an energy mix consisting of 71% renewable and recoverable energy. Work to extend the network and its access will continue in the coming years, eventually meeting a targeted 84% of the district's needs.
- **The Bellevue heating network:** operated by the Nadic company (DALKIA), this network served 9,600 homes in the west of Nantes and in Saint-Herblain as of late 2019, and covered a total distance of 23 km. The heat is produced by a 13-MW wood-fired plant which came online in March 2013. More than 51% of the energy it supplies to the grid is generated from renewable fuels;
- **The heating network in the La Noë Comprehensive Development Zone in Saint-Jean-de-Boiseau:** operated by NOVAE (IDEX), the network is supplied by a wood-fired heating plant that covers an average of 70% of heating needs and serves 140 housing units. Since 2018, its management has been integrated into the new Nord Chézine public service delegation contract;

- **The heating network supplying the La Minais Comprehensive Development Zone in Sainte-Luce-sur-Loire:** operated by IBEM (IDEX), the network is fed by a wood-fired plant which covers 60% of heating needs and serves 250 homes. A users' committee allows regular communication between users and operators with a view to continuously improving the service;
- **the Nord Chézine network:** work is still in progress on this major new heating network. This new public service delegation for the development of the Nord Chézine heating network was awarded to NOVAE (IDEX) in January 2017. Supplied primarily by the Arc en Ciel waste processing and recovery plant, the network will cover Nantes' northern districts (Bout des Landes, Bout des Pavés, Boissière, etc.), Orvault, Saint-Herblain and possibly Couëron, providing heating for nearly 10,000 homes. By the end of 2019, 22.5 km of network had been laid and 4,908 homes supplied with heat, including 1,580 homes connected to the Couëron heating plant.

A local area that produces renewable energy

The Renewable Energies action plan will significantly increase the production of local renewable energies, while at the same time reducing the use of fossil fuels, which emit substantial amounts of CO₂.

Nantes Métropole has set itself the target of meeting 50% of the local area's consumption needs with local renewable energies by 2050.

Highlights in 2020 included the continuation of the "Sun" action plan that bolsters the solar-related initiatives undertaken over the past few years:

- ongoing work on the online solar land registry platform developed by "In Sun We Trust";
- launch of the 100% useful private roofs project, which aims to create 15 large solar, vegetation or urban agriculture installations on the largest rooftops in the region;
- experimentation with locally-sourced energy with an R&D contract to connect the energy produced by photovoltaic (PV) plants in the public domain, to the power consumption of equipment. This R&D contract will continue in 2021 with an innovation contract to supply part of the "Champs de Mars" metropolitan building and the Trocardière hall via 7 PV plants (Beaulieu, Petite Californie STEU (wastewater treatment plant) and NGE plants);
- participation in the Bois Cesbron collective self-sufficiency projects with Sydela and "Le soleil Brille à Malakoff" with Nantes Métropole Habitat;
- supporting new citizen groups with renewable energy projects (Les Forges on t'aime, Energies Citoyennes Sud Loire, etc.).

Nantes Métropole has also focused its action on other renewable energy sectors:

- wind energy: guidance and support for the NANTEOL company, which is running a community wind energy project on the Mauves meadow;
- renewable heat: continuation of the COTER target contract started in 2018 and financed by ADEME (French Environment and Energy Management Agency) for the development of renewable heat in the private and public sectors (wood energy, waste heat, solar thermal, geothermal), with an ambitious target of 18 projects to produce 573 toe (tonnes of oil equivalent) of renewable energy over 3 years.

Local authorities setting standards, regardless of their size

Continuation of the shared energy advisory service (CEP) for local authorities, initially launched on the 1st of January 2018. The aim of this scheme is to provide guidance and support to local authorities with fewer than 10,000 residents in the metropolitan area by pooling the services of an operational energy advisor, who can:

- carry out energy assessments, analyse and track the energy consumption of local authorities' building stock;
- perform energy audits of buildings and recommend ways to reduce energy consumption;

- guide and support local authorities' energy efficiency projects;
- raise awareness and train municipal teams in energy issues and the uses of public property.

Nine of the 13 eligible municipalities joined the scheme from its launch in 2018: Basse-Goulaine, Bouaye, Brains, Indre, La Montagne, Les Sorinières, Mauves-sur-Loire, Saint-Aignan-Grandlieu and Sautron. In 2019, 3 new municipalities of less than 10,000 residents applied to join the scheme: Le Pellerin, Saint-Jean-de-Boiseau, Saint-Léger-les-Vignes. To date, all 13 eligible municipalities are members. Thouaré-sur-Loire has also joined the scheme.

The member municipalities, which do not have in-house energy expertise, have high expectations regarding project support. Between 2018 and 2020, nearly 40 projects were supervised by the CEP scheme.

Optimization of public lighting, illuminated signs and shops

In 2019, Nantes Métropole persisted in its drive towards energy-efficient street lighting by applying the principle of "rational lighting" (energy sobriety). The authority continued in its efforts to adapt lighting to actual requirements. Where appropriate, lighting levels in some areas have been dimmed by:

- replacing old light bulbs and lamps with energy-efficient alternatives;
- continuing to switch off lighting completely in some districts where the municipalities are happy to do so;
- and limiting middle-of-the-night street lighting to roads, town centres and business districts.

At the same time, Nantes Métropole also monitors developments in innovative lighting solutions (LEDs, motion detectors, etc.).

The Lighting Development Consistency Plan was being finalised at the end of 2019.

NB:

- A study by CEREMA in collaboration with the departments of Nantes Métropole is underway on the effects of illuminated areas on biodiversity, with the eventual aim of putting measures in place to preserve fauna and flora.
- Following the new contract awarded to JCDecaux in 2017 (municipalities of Nantes, Rezé, Saint-Herblain, Saint-Sébastien, Orvault, Sautron and La Chapelle-sur-Erdre), the number of street furniture units in the metropolitan area (of between 2m² and 8m²) has been reduced by 12% (a total of 840 units, compared to 952 previously).
- An awareness campaign on managing energy consumption in shops and businesses is currently being prepared. The aim is to highlight the issue of lighting and illuminated signs, in line with the new regulation on the limitation of light pollution of December 2018.

Key figures in 2020

- 2,031 enquiries made to the Energy Information Point;
- As of end-2018, the metropolitan area has 5,873 km of electricity grids, 2,337 km of gas networks and 110 km of district heating networks.
- More than 36,000 homes are connected to district heating networks and the same amount of heating is supplied to public buildings.
- 63% of the heating distributed by the district heating networks comes from renewable and recoverable sources (wood and waste).
- 340,000 m² of photovoltaic solar panels were installed across the local area by late 2019.
- 1,060 GWh of electricity had been produced from renewable and recoverable energies at end-2019.

URBAN TRAVEL: IMPLEMENTING THE OBJECTIVES OF THE URBAN TRAVEL PLAN

Replacing the 2010-2015 plan, the new 2018-2027 Urban Travel Plan (PDU) "Outlook 2030" was adopted by the Metropolitan Council on 7 December 2018. It is the roadmap for the travel policy, which is implemented on an ongoing basis. In addition to initiatives driving behavioural change, soft mobility and the development of mobility services, a number of measures have been taken or launched in 2020 with the aim of achieving the objectives of the PDU.

Highlights include:

- last spring, the health crisis prompted the City of Nantes and Nantes Métropole to facilitate walking and cycling in the city. Public stakeholders, elected representatives, public services and user associations have worked together to implement a plan to develop temporary pedestrian and cycle facilities. It also involved reducing the speed limit to 30kph in the city of Nantes and encouraging the use of modes of transport that are beneficial to health and the environment and adapted to social distancing and measures to prevent virus propagation. Suitable solutions, designed to discourage using the car, have been proposed to the inhabitants of the city;
- consultation for the development of new tramway lines to serve the future university hospital;
- initial studies for the cycle route development master plan;
- a study for the bus facilities master plan (in progress);
- the creation of a travel observatory and geographical information system;
- research into ways of promoting the growth of alternatives to single-occupancy car travel, as part of the metropolitan area's urban development and appeal. Flagship initiatives include:
 - a study of travel in the north-east quadrant (in progress);
 - a study of an "all modes" urban core accessibility plan (in progress);
 - the study of the master plan for the Nantes Atlantique airport and the airport zone (in progress);
 - a study on improving the use of major metropolitan roads (particularly carpooling lanes);
 - support for a self-driving shuttle project run by the SNCF on the old Doulon-Carquefou railway line;
 - support for various urban studies: route de Vannes (in progress), Atlantis (in progress);
 - execution and support of travel and parking studies on a variety of levels: example in the municipality of Saint-Sébastien-sur-Loire (in progress);
 - the study of the master plan for the Nantes railway junction and the Nantes Angers Sablé axis;
 - a study to improve performance, journey time and capacity on Nantes-Paris routes.
 - the resumption of studies on improving the Nantes-Rennes rail link.

ORGANISED, COMPLEMENTARY AND ACCESSIBLE TRAVEL NETWORKS

Nantes Métropole benefits from an efficient and coordinated public transport network, consisting of TAN buses and trams, Aleop coaches and TER regional trains, servicing all of the municipalities in the conurbation.

More than 95.4 million journeys were made on the network in the year 2020, a 35.8% drop in passenger numbers due to the health crisis and the spring 2020 lockdown. The coverage also fell for the same reasons, dropping to 26.34 million km.

Highlights in 2020

- **Adaptation of the public service delegation (DSP) with TAN**

The health crisis and the lockdown of the population from 16 March to 12 May 2020 have had significant consequences on the operation of the public transport network, but also on the execution of the public service contract with TAN, covering the period 2019-2025.

An amendment to the contract was signed (Amendment No. 2) in order to take into account the effects of the health crisis on the contract's expenses and revenues and to adapt certain clauses in order to specify the terms of execution.

- **A change in the offer in September 2020 impacted by the health crisis**

The health crisis has disrupted the implementation of changes to the public transport network (as envisaged for the start of the school year in September 2020).

Service improvements such as the overhaul of the South-West sector service, changes to the Chapelle-sur-Erdre service or modification of the E1 or g1 line services have been postponed.

Only changes to the service to alleviate the overcrowding observed on certain lines in the network have been implemented from 2 November 2020.

All these provisions lead to an increase in coverage of 116,093 kilometres, or +0.39% compared to 2019.

- **Regarding projects currently under study:**

- **replacement of tram carriages:** Alstom has been selected to build the new tram carriages. At the same time, work was started to adapt the existing infrastructure and CETEX to allow these new, longer trains to run on the network;

- **extension and connection of lines 1 and 2, Phase 2 / CETEX Babinière:** studies are continuing to extend the tramway line 1 from Ranzay to Babinière, as well to build a new CETEX tramway maintenance hub to accommodate the new tramway cars currently being acquired and to build the new Park-and-Ride;

- **renovation of tramway line 1 Feydeau-Commerce:** continuation of studies and preparatory work to renovate the tramway infrastructure postponed to summer 2021 due to the Covid-19 health crisis;

- **development of new tramway lines (DNL):** launch of consultation at the end of 2020;

- **transfer of the Nantes-État railway facilities:** since the spring of 2019, work is ongoing to clear the Nantes-État site, an area of approximately 16 ha of railway facilities on the west of the Île de Nantes, to allow the urban development of the Sud Ouest Comprehensive Development Zone on the Île de Nantes to be carried out, and more specifically the installation of new tramway infrastructure;

- **transformation of the C5 into a busway (L5)** to improve the regularity and frequency of the line;
- **airport zone accessibility master plan:** study ongoing in 2020, co-financed by the French Government, the Region and Nantes Métropole. Target completion date: spring 2021.
- **LEMON mobility experimentation laboratory:** preparation of a Mobility Hub experiment at La Chantrerie, designed to research and then test solutions to cover the last kilometre in active modes from stops C6 and E5.

Key figures in 2020

- Nantes Métropole boasts a tram network covering 45 km and a Busway network of 12 km;
- Chronobus lines cover a total network of 84 km.
- The conurbation is served by a network of 44 bus lines.
- 3 Navibus lines (Erdre et Loire).
- The TAN network recorded 95.4 million journeys, a drop of 35.8%.
- Covoit'Tan: 7280 signups at the end of 2020. In 2020: 975 Libertan subscribers transported; 8,507 journeys made.

ENCOURAGING SOFT TRANSPORT

Through its successive cycle plans, Nantes Métropole continues to encourage and cater for cyclists.

In 2020, the French cycling federation (FUB) named Nantes as the second most cyclable city in France (in the category of cities with a population of more than 200,000) based on the results of its national "cyclability" survey.

The desire to develop active modes (cycling as well as walking) was marked by the measures taken in connection with the health crisis. After the May lockdown, Nantes Métropole set up 21 km of temporary bicycle facilities, pedestrianised many streets in the centre of Nantes and reduced the speed of traffic in the city to 30 km/h, as part of the "Street for All" operation to encourage the development of active modes of transport. These improvements and measures were assessed over a period of more than six months and led to permanent changes or corrections following public consultation.

An ambitious cycle plan for 2015-2020

Through its second cycle plan (2015-2020), adopted in February 2016, Nantes Métropole wanted to invest €50m in promoting an ambitious cycling policy.

Over the course of 2019, 16km of cycle lanes and cycle paths were built in the metropolitan area, bringing the total length of cycling infrastructure to 586 km, including 144 km of cycle paths and 242 km of cycle lanes.

The key points of the bike plan:

1) Actions on parking

In 2020, there were 1,482 secure, sheltered parking spaces or open-access spaces in "véloparcs" or park-and-ride (P+R) facilities, along with 1,418 bike parking spaces in covered parking facilities in the city centre or at the train station.

In addition, 2 secure collective shelters (each with 48 spaces) and 2 open collective shelters (with 20 spaces) have been installed at Couëron and Saint-Herblain stations.

As part of tactical urban planning, 700 bicycle parking spaces have been added in the city centre of Nantes and certain districts.

2) Actions on safety

These developments relate to public spaces. In 2020, cycle routes were enhanced with 16 km of new cycle paths and network upgrades through:

- temporary bicycle infrastructures as part of the tactical urban planning linked to the health crisis: Quai de la Fosse; crossings of the Anne de Bretagne, Trois Continents and Willy Brandt bridges; Route de Clisson; Boulevard Guy Mollet; Route de Vannes, etc.
- infrastructures built in the streets Rue de la Martellière in Saint-Sébastien, Rue de l'Aérodrome in Rezé, Rue de l'île Chaland in Basse-Goulaine, Rue de la Gare in Bouaye, the Boulevard Pierre de Coubertin in Nantes, etc.

3) Actions to develop services

In 2020, of the many initiatives aimed at making cycling easier for citizens, long and short-term bike hire services such as "Bicloo", "Métropole à Vélo" and "Vélocampus" remained very popular.

- the number of subscribers to "Bicloo Plus" stands at 26,164 with a fleet of 1,230 self-hire bikes at 123 stations;
- the number of subscribers to the medium and long-term bike-hire service "Mon Bicloo" was 1,741 with a fleet of 2,190 bicycles (cargo, folding, standard with electric or pedal bicycles for each category);

- 11,076 subsidies for the purchase of an electric bike have been granted since the scheme was launched in 2010. This includes 834 subsidies (of up to €300) to private individuals for the purchase of a cargo or family bike (since the scheme was launched in 2012);
- since March 2016, financial assistance of up to €400 is available for professionals who travel by bike. By the end of 2020, 297 grants had been paid out for a total of €129,233;
- in 2020, new aid schemes were launched, one for the purchase of electric bicycles by the general public and the other for bicycle repairs, in addition to the "Coup de pouce vélo" scheme launched by the French Government.

4) The school eco-mobility scheme

The purpose of the school eco-mobility scheme is to limit the use of the car for travel between home and school and encourage alternative modes, such as walking, cycling, using a scooter or public transport.

By September 2020, 47 schools had joined the scheme, including 20 schools in Nantes and schools in 20 other municipalities (La Chapelle-sur-Erdre, Orvault, Les Sorinières, Sainte-Luce-sur-Loire, Le Pellerin, Saint-Herblain, Sautron, Mauves-sur-Loire, Bouaye, Couëron, Indre, Basse-Goulaine, Saint-Sébastien-sur-Loire, Carquefou, Brains, Saint-Jean-de-Boiseau, Rezé, Bouguenais, Thouaré-sur-Loire and La Montagne). After a trial phase followed by a review, three temporary pedestrian zones were added to the scheme in the morning at the Bois Saint-Louis (Orvault), Ledru Rollin (Nantes) and Robert Badinter (Saint-Jean-de-Boiseau) schools.

5) Continuation of the studies on improving major roads in the conurbation:

The studies focus on four areas: Boulevard de Vendée, Route de Pornic, Chemin de la Justice and Prairie de Mauves with reserved lanes for carpooling and public transport. An experiment on the Prairie de Mauves is planned for 2021.

6) Continuation of the development of the Master Plan for Cycle Routes (SDIC)

The objective is to create 50 km of main routes by 2026. In addition to this category, the SDIC will also plan the construction of "structuring" roads, as well as "secondary and linking" roads. Feasibility studies will be undertaken in 2021 on the selected main routes, prior to consultation with the inhabitants.

7) Route marking

The Place Viarme-Rue du Poitou sector was marked in 2020.

8) Events in 2020:

- "Tous en Selle" - Saddle up with the great bike workshop at Les Nefs from 3 to 10 June,
- "Tous en Selle" -saddle up with the great bike market in the form of a bike fair on 26 September,
- About thirty meetings in different cities over the period from June to mid-October with the opportunity to have your bike serviced or marked.

Key figures in 2020

- 586 km of cycling infrastructure: cycle paths and lanes, bus lanes open to bicycles, Chaucidou shared-space traffic lanes, shared-use paths (cycles/pedestrians), greenways, cycle superhighways and mixed-traffic zones.
- 2,900 off-street parking spaces, including 2,098 secure spaces and 802 self-service spaces.

ENCOURAGING SOFT TRANSPORT

Through its successive cycle plans, Nantes Métropole continues to encourage and cater for cyclists.

In 2020, the French cycling federation (FUB) named Nantes as the second most cyclable city in France (in the category of cities with a population of more than 200,000) based on the results of its national "cyclability" survey.

Against all expectations, the health crisis has led to an acceleration in the development of active modes of transport (cycling and walking). After the May lockdown, Nantes Métropole set up 21 km of temporary bicycle facilities, many streets in the centre of Nantes were made pedestrian-friendly, and, as part of the "Street for All" operation, the city of Nantes went to 30 km/h. These improvements and measures were assessed over a period of more than six months. This led to permanent changes or corrections following public consultation.

An ambitious cycle plan for 2015-2020

Through its second cycle plan (2015-2020), adopted in February 2016, Nantes Métropole wanted to invest €50m in promoting an ambitious cycling policy.

Over the course of 2020, 16 km of cycle lanes and cycle paths were built in the metropolitan area, bringing the total length of cycling infrastructure to 586 km, including 144 km of cycle paths and 242 km of cycle lanes.

The key points of the bike plan:

1) Actions on parking

In 2020, there were 1,482 secure, sheltered parking spaces or open-access spaces in "véloparcs" or park-and-ride (P+R) facilities, along with 1,418 bike parking spaces in covered parking facilities in the city centre or at the train station.

In addition, 2 secure collective shelters (each with 48 spaces) and 2 open collective shelters (with 20 spaces) have been installed at Couëron and Saint-Herblain stations.

As part of tactical urban planning, 700 bicycle parking spaces have been added in the city centre of Nantes and certain districts.

2) Actions on safety

In 2020, cycle routes were enhanced with 16 km of new cycle paths and network upgrades through:

- temporary infrastructures as part of the tactical urban planning linked to the health crisis: Quai de la Fosse; crossings of the Anne-de-Bretagne, Trois Continents and Willy Brandt bridges; Route de Clisson; Boulevard Guy Mollet; Route de Vannes, etc.
- infrastructures built in the streets Rue de la Martellière in Saint-Sébastien, Rue de l'Aérodrome in Rezé, Rue de l'île Chaland in Basse-Goulaine, Rue de la Gare in Bouaye, the Boulevard Pierre de Coubertin in Nantes, etc.

3) Actions to develop services

In 2020, of the many initiatives aimed at making cycling easier for citizens, long and short-term bike hire services such as "Bicloo", "Métropole à Vélo" and "Vélocampus" remained very popular.

- the number of subscribers to "Bicloo Plus" stands at 26,164 with a fleet of 1,230 self-hire bikes at 123 stations;
- the number of subscribers to the medium and long-term bike-hire service "Mon Bicloo" has reached 1,741 with a fleet of 2,190 bicycles (cargo, folding, standard with electric or pedal bicycles for each category);

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- About thirty meetings in different cities over the period from June to mid-October with the opportunity to have your bike serviced or marked.

Key figures in 2020

- 748 km of cycling infrastructure: cycle paths and lanes, bus lanes open to bicycles, Chaucidou shared-space traffic lanes, shared-use paths (cycles/pedestrians), greenways, cycle superhighways and mixed-traffic zones (the figures for 2020 are not yet included in this total).
- 2,900 off-street parking spaces, including 2,098 secure spaces and 802 self-service spaces.

SUPPORTING BEHAVIOURAL CHANGE IN MOBILITY

Developing more environmentally conscious mobility options means making users aware of the environmental impacts of their travel choices and motivating them to adopt new practices. To do this, Nantes Métropole informs, advises and supports residents according to their needs.

Providing multimodal travel information tools and open data

To facilitate access to alternative means of transport to single-occupancy car use, Nantes Métropole has worked with various regional and national partners to provide travel information tools for the general public:

- [Destineo](#), is a multimodal information system managed by the Pays de la Loire Region (including the departments) and 12 transport organising authorities such as Nantes Métropole and CARENE. This journey planner is one a number of digital tools offered by EMITAN and Nantes Métropole (websites and mobile apps, along with “Nantes Dans Ma Poche”) to help online users plan their journeys or find out when the next bus will arrive at their stop, and receive live information on the go;
- [Géovélo](#), is a route planner specifically for cyclists, using a variety of criteria (speed, safety, points of interest for tourists, etc.). Géovélo gives users information about the location and real-time availability of the bicloo bike hire stations. Cycle paths and bike parks are also included in the tool, which also lets users contribute to the maps by rectifying or adding information;
- [Questgo.fr](#), the free, public, inter-regional, solidarity-based, open-source carpooling service, was developed and managed in partnership with five other major local authorities in Western France;
- Covoit’Tan: application offering a carpooling service using your public transport pass and that pays drivers;
- e-démarche mobility, which provides a virtual subscription to public transport services;
- 96 "Mobility" data sets are available through the data.nantesmetropole.fr platform, which helps local apps find their audience. Some, such as [Naonedbus](#), have become very popular with users in Nantes;
- a partnership with the national platform [transport.data.gouv](https://transport.data.gouv.fr) to encourage wider use of the data and help more users become familiar with the mobility services available in the metropolitan area. The partnership also allows users to add to and check the quality of data sets.

Financial assistance for bike purchases

Since 2010, Nantes Métropole has been encouraging local citizens and businesses to buy bikes, either standard or electric, to boost cycling in the area. For example, in 2020, the authority subsidized the purchase of 4 573 bikes, broken down as follows: 301 family bicycles (cargo) and 396 bicycles for professional use and 3,876 electric bikes acquired by local citizens (post-Covid measure), for a total subsidy of €830.1 k.

“Coup de pouce vélo” (Saddle-up) scheme

To encourage the use of bicycles when the lockdown was lifted, Nantes Métropole also contributed €50/bike to the repair aid scheme set up by the State.

The mobility plan

A quarter of all journeys made in the conurbation are work-related. The commute is also, on average, the longest journey of the day and a deciding factor in the choice of transport used for other daily journeys. Hence the importance of taking action in this area.

With this in mind, Nantes Métropole has been helping employers and their employees find the most suitable mobility solutions since 2004. The aim is to minimise single-occupancy vehicle use and encourage people to walk, cycle, use public transport and carpooling schemes.

The support provided by Nantes Métropole as part of the mobility plan scheme covers four main areas:

- assistance and advice;
- discounts on mobility services for employees and employers;
- information and awareness-raising initiatives for employees;
- the training of mobility officers at workplaces.

In late 2018, a new business guidance and support solution was adopted. It offers a range of tailored systems, based on the company's chosen level of involvement in promoting sustainable mobility to its staff. Three levels are available:

- pack 1: information and benefits;
- pack 2: event marketing;
- pack 3: mobility guidance.

All told, at end-2020, 730 employers with a combined workforce of more than 160,000 employees had signed up to a mobility pack scheme (67% had chosen Pack 1).

Mobility management schemes for business hubs

In addition to providing sustainable mobility support for individual employers, Nantes Métropole has also undertaken two major joint operations (mobility solutions with the employers) at two business hubs: La Chantrerie (Nantes) and the Jules Verne innovation hub (Bouguenais and Saint-Aignan-de-Grandlieu). The challenge is to map out more responsible mobility solutions for commuting by getting employers to work in tandem with the local authority on rolling out joint initiatives. Objective: to bring mobility behaviour in line with the energy transition.

Ecomobility for students: "transport and travel" events and guided tour of the Restricted Traffic Zone (ZTL)

In 2020, Nantes Métropole continued working with Écopôle, an association working to improve environmental education and sustainable development, on running of a series of eco-mobility awareness events for students of primary school age and upwards. Activities have been adapted for e-learning application in schools, in light of the pandemic situation. These eco-mobility discovery tours are part of the roadmap towards the ecology and energy transitions.

In 2020, 16 "transport and travel" modules were taught and for 12 classes in 10 schools from 5 municipalities in the metropolitan area.

Travis the Travelling Snake

To encourage parents and their children to do the school run using alternative modes to the car, Nantes Métropole organises a fun, European eco-mobility challenge called "Travis the travelling snake". In 2020, owing to the epidemic context, only one school in Bouaye participated in the challenge.

SécuriTan: classroom activities run by TAN

SécuriTan is an educational event that teaches safety and citizenship to CM2 classes in schools that are on the school transport runs. It raises awareness about going to school using public transport, school buses and bicycles. Organised by Nantes Métropole, the initiative is run by SEMITAN mediators. The one-hour sessions consist of two parts:

- The first is theory-based, in which the students are shown a film focusing on the different modes of transport available to CM2 students in the Nantes area, i.e. public transport (how to behave at a stop, when approaching the vehicle and inside, rules of use, etc.), cycling or walking;
- the second is practical, involving a Q&A session exploring the public transport network, its use and safety.

These tools and events are available for all public and private schools in the metropolitan area, but priority is given to establishments that elect to take part in Nantes Métropole's eco-mobility scheme for schools.

The schools involved are also offered specific events, such as bike-riding lessons for pupils in CM1 and special eco-mobility awareness-raising events organised for parents and children. In 2019, 12 schools were involved in the scheme for bike-riding lessons or other learning events.

Key figures in 2020

- 730 employers were involved in a mobility pack scheme, reaching a total of 160,000 employees;
- 4,513 bike purchases were subsidised for a total of €830k.
- 96 "Mobility" data sets provided through the data.nantesmetropole.fr.

CALMING TRAFFIC

In order to enhance the appeal and vibrancy of its urban hubs, Nantes Métropole is seeking to calm traffic throughout the conurbation.

The authority continues to place a particular focus on initiatives to improve road safety and help prevent accidents involving schoolchildren. As part of this drive, Nantes Métropole's municipalities have increased the number of traffic-calmed areas with a 30 kph speed limit.

Motorised traffic giving way to soft modes of transport

Traffic management plays a major role when it comes to changing habits and fostering better coexistence and mobility between various road users in urban areas.

The aims are:

- to ease the flow of traffic, particularly by lowering speed limits;
- to give greater priority to soft transport modes (cyclists and pedestrians).

In 2020, the health crisis prompted the city of Nantes and Nantes Métropole to accelerate the practice of walking and cycling in the city. Among other actions, the municipality of Nantes has increased the number of pedestrianised streets (as part of the reflection on distancing). It has experimented with the conversion of many sectors into mixed traffic areas and has experimented with and then perpetuated the general conversion of the entire municipality into a 30 kph zone (apart from certain roads serving major public transport lines where the environment was not suitable for 30 kph).

As a reminder, the metropolitan Urban Travel Plan (PDU) sets a target of converting 70% of roads in the conurbation (excluding main roads) to "traffic-calmed" roads by 2027.

Traffic in the conurbation

In 2020, average total traffic in the conurbation had decreased 20% compared to 2019 (-1% between 2019 and 2018). The average journey time has fallen by 12% in the morning and 13% in the evening. This decrease in traffic is due to the implementation of various lockdown and curfew periods during the COVID-19 pandemic and the development of teleworking.

Pooled operating system tools

Since February 2014, the national department responsible for managing the ring road around Nantes has benefitted from a control post known as "Sextan" (traffic operating system for the Nantes conurbation).

This system manages all traffic flows on the ring road in real time. Its interconnection with Nantes Métropole's control post has made it possible to respond more effectively to traffic across the conurbation and direct users using the equipment in place (cameras, variable message signs, measurement systems).

It also provides a more effective way of managing the closure of th

Road safety

Nantes Métropole has chosen to focus even more on road safety with an elected representative assigned to this topic (Anthony Berthelot). Furthermore, Nantes Métropole is working on a daily basis with all 24 municipalities and in conjunction with the State, the departmental council, the police, the Loire-Atlantique departmental fire and rescue service (SDIS 44), the national education system and the voluntary sector to reduce the accident rate in its local area (improving public spaces, interactions, etc.).

Nantes Métropole introduced a system to study accidents in the conurbation with the aim of analysing the impact of new road features on road safety.

It also helps develop road safety awareness campaigns for schoolchildren (ecomobility), and regularly addresses the population in cooperation with its partners (National Education authorities, police, road safety organisations, etc.).

Key figures in 2020

- 3,772 km of roads (all categories combined), including 501 m on private land and 41 km managed by the departement.
- Traffic on the Senghor bridge: 10,569 vehicles a day (14,014 in 2019).
- Traffic on the Tabarly bridge: 12,515 vehicles a day (15,559 in 2019).
- Traffic on the Cours des 50 Otages: 4,620 vehicles a day (5,308 in 2019).
- Other pedestrian zones: 22 km, or 22 ha.
- Combined length of cycle lanes and paths: 586 km.
- 30-kph zone / 30-kph section: 1,268 km (according to traffic orders). These areas include: west town-centre district in Couëron, Garenne, Chaume and Briandière districts in La Montagne, and virtually all of Indre and Nantes.
- Mixed-traffic zone (pedestrian priority roads): 28 km (according to traffic orders).
- Restricted Traffic Zones (ZTL): 1.5 km (Duguay Trouin pedestrianised).
- Roundabouts: 1,144, of which 50 are double roundabouts.
- Closure of the North to South axis crossing Place Graslin (North/South traffic on Place Graslin: 3,983 veh/day in 2019).
- 160 personal injury accidents (provisional figure), 10 fatalities. It should be noted that the year and the 2020 balance sheet are special because of the various lockdowns that have had a strong impact on travel and therefore, on accidents involving injuries.

A GROWING RANGE OF PARKING SOLUTIONS

Parking is one of the key levers of Nantes Métropole's travel policy. It is used to regulate the use of private cars in the territory. Over a number of years, a range of measures have been deployed to regulate supply and demand for parking in various areas, specifically the city centre, the vicinity of the train station and the ring road around Nantes.

Park & Ride: a growing supply of car parks have been created around the public transport network

With a choice of outdoor or multi-storey car parks, with open or controlled access, Park & Ride (P+R) car parks allow drivers and cyclists to leave their cars, motorbikes and bicycles in secure parking and continue their journey by tram, BusWay, train, Chronobus or Navibus.

The management scheme for controlled-access P+Rs (20 P+Rs, 4,957 spaces) has achieved its goal of freeing up parking spaces for the benefit of public transport users. The scheme gives preferential access to public transport users (free access maintained for Libertan cardholders), making it possible to regulate access to P+R for motorists wanting to travel in the city by tram, bus, train, Chronobus or Navibus.

The impacts of these P+Rs, which are already particularly visible in those north of the Loire, are being heightened on the southern side of the Loire in 2020 and 2021 with the delivery of the new Porte de Vertou P+R (August 2020) and Neustrie P+R (January 2021). Started in 2019, this extension work will provide more than 1,000 additional parking spaces for public transport users.

As for rail, after the extension of the P+R at the Bouaye station (190 new spaces, July 2020), studies are being launched to consider additional services at Mauves and Couëron stations.

Furthermore, work to extend the Duguay Trouin P+R on boulevard Charles Gautier in Saint-Herblain on the C3 Chronobus line is due to start in 2021. The 180-space P+R will be available on the lower level of a building complex allocated to the tertiary sector (delivery expected in 2022).

At the same time, studies are underway to provide more park-and-ride spaces on the outskirts of the ring road in conjunction with the development of public transport services. A P+R near Porte de l'Estuaire is planned at the same time as the extension of the C20 up to the ferry terminal (last quarter of 2022).

In addition, two new high-capacity facilities are planned (by 2025-2026) on the P+R sites at Babinière (500 spaces) and Bourdonnières 1.

Beginning of 2021: a total of 62 P+Rs are distributed across the metropolitan area. This represents 8,651 car parking spaces and 1,365 bicycle spaces, for a total of 10,016 parking spaces.

Car parks in the city centre and at the train station

The Descartes car park opened to the public in November 2020. This 250-space car park is part of a plan to redevelop and renovate the former prison site. It compensates for the closure of the Commerce car park during development work on the Place du Commerce.

At the same time, the Aristide Briand car park has been given a facelift to make it more attractive to users. Signage and paintwork have been redone and 17 charging points for electric vehicles have been installed.

As part of the Feydeau-Commerce works, the Commerce car park will be modernised. It will be equipped with a lift to make it accessible to people with reduced mobility, a secure bicycle park with 300 spaces and 10 charging points for electric vehicles. The works require complete closure from February to November 2021.

On the Île de Nantes, work is now underway on the construction of the École du Design car park. From 2022, this new public car park will offer 501 parking spaces in the heart of the creative district.

For the station, the new Gare Sud 2 car park was opened in August 2020. This 490-space facility, located at the heart of the Euronantes urban project, will complete the district's parking facilities and free up the Malakoff slipway (the current canal station car park) for a temporary parking area reserved for taxis (scheduled for completion in June 2021).

In 2020, 174 charging stations for electric vehicles were deployed in the public car parks in the city centre, the railway station and the Neustrie and Porte de Vertou P+Rs (10 charging stations each). Installation work will continue into 2021 to reach a total of 215 charging stations available to the public (end of 2021). Note: the charging stations, whether slow or fast, are equipped with sockets suitable for all types of vehicles and are accessible free of charge without reservation (only parking is charged).

Between 2019 and 2020, attendance at both indoor and outdoor parks was severely disrupted by lockdown periods resulting from the health crisis (COVID-19). A 33% decrease in visitors was observed for all car parks. Only 2,582,742 visitors used the town centre and station car parks in 2020.

Key figures in 2020

- 62 P+R car parks providing 10,016 parking spaces, including 1,365 spaces for bicycles.
- 17 multi-storey car parks and 14 open-air car parks, totalling 10,762 parking spaces in Nantes city centre, including 1,301 bicycle spaces.

REDUCING, SORTING, COLLECTING AND RECOVERING WASTE

Nantes Métropole ensures the prevention and management of household and similar waste (DMA) for the 24 municipalities in the area.

By definition, household and similar waste is waste generated by residents, as well as any waste from the private and public sector that can be classified as household waste in terms of the quantity and type of waste produced.

The 2014-2020 Action Plan and the Energy Transition Road Map

The user and local areas are a core focus of the projects implemented by Nantes Métropole, leading it to develop an action plan with 3 strategic priorities, namely:

- to turn citizen-users into enlightened stakeholders and facilitate access to services;
- to align public waste management policy with the energy and green transition;
- to offer an effective service that is tailored to the challenges of the local area.

The public "Waste" policy is at the confluence of several environmental and societal challenges. It sets ambitious targets in terms of waste prevention and recovery:

- to reduce household and similar waste by 20% by 2030 as compared to 2010 (in kg/capita/year, excluding rubble). This objective is in line with the target trajectory of the national reduction programme, which aims to achieve a 10% reduction in household and similar waste (excluding rubble) by 2020 compared to 2010;
- to achieve 65% material recovery of household and similar waste by 2025 (excluding rubble and hazardous waste).

In continuation of the "zero waste local area" scheme, and to achieve these objectives, Nantes Métropole is expanding its waste prevention and recovery initiatives, specifically through the 5 commitments to the circular economy outlined in the Nantes Métropole energy transition roadmap, which are:

- to step up efforts to combat food waste;
- to encourage local reuse and repair;
- to develop solutions for the sorting and organic recovery of bio-waste;
- to make sorting a natural reflex;
- to optimise recycling and the energy recovery of waste.

The waste management department also contributes to the following commitments of the roadmap for a 100% community-led transition:

- to provide a local educational service in terms of energy transition;
- to coordinate 100 "citizen labs" in order to network initiatives and continue the communities and challenges committed to as part of the Big Debate;
- to give a new impetus to the support measures offered to small and medium-sized enterprises and local traders in terms of mobility, energy and waste;
- to support 1,001 eco-events by 2025.

Commitment at all levels

The waste management department has been ISO 9001 certified since May 2015. This certification, awarded by the French Organisation for Standardisation (AFNOR), sets out the requirements to set up a quality management system. In particular, they must form part of a continuous process of improving practices, with the aim of meeting users' needs and expectations as adequately as possible. In order to maintain this quality certification, which attests to the degree of control of activities, a renewal audit will be carried out in September 2020.

The Waste Department has set itself the objective of becoming triple-certified in Quality, Safety and the Environment by 2021.

Implementing the action plan in 2020

To raise public awareness of the importance of reducing and sorting waste, events adapted to the health crisis were held to allow waste coordinators to meet residents in person or online:

- a "zero waste citizen challenge" event (for the 5th year), in parallel with the "energy" and "food" challenges. The number of citizens taking part increased from 180 households in 2019 to 215 in 2020, i.e. more than 800 people. Despite a challenge disrupted by the health crisis, participants reduced their waste by 17.5% in 3 months (i.e. a reduction of 20 kg of waste per person per year);
- European Waste Reduction Week: organized in conjunction with Ecopôle and its group of 24 associations, this program of events was adapted to the November situation (2nd lockdown) by offering a 100% digital version with practical workshops in videoconference, live commented tutorials and online conferences devoted to the theme of reuse. These online events were attracted more than 500 people;
- the team of waste ambassadors and waste coordinators took part in events in the districts and municipalities. In total, 44 events brought together nearly 1,450 inhabitants from the local area and 1,852 pupils in schools (79 classes educated, including 12 classes that participated in a zero waste challenge);
- support for professionals, festival and event organisers in an eco-friendly initiative for the 8th year running. One of the main focuses of the metropolitan area's eco-events programme is to help 40 organisations hold "zero-waste events". NB: the support and training initiative has a dedicated website at www.reseau-eco-evenement.net.

Of course, many events had to be cancelled in 2020 due to the health context: the food waste prevention villages "Les Grandes tables de l'Agglo", the information stands in public places, certain festivals and events. These schemes are postponed to 2021.

Nantes Métropole is stepping up its actions to encourage local composting of food and vegetable waste:

- support for individual composting and vermicomposting: since 2010, nearly 19,800 households have been provided with composting equipment with the help of Nantes Métropole subsidies. In 2020, 1,435 new households benefited from this scheme. As of the 1st November 2018, these subsidies increased from €20 to €30 for an individual composter. For the purchase of a vermicomposter, the amount reimbursed has doubled from €20 to €40;
- support for the Compostri association, which helps residents with collective, community composting: 39 new sites, including 2 social housing projects in 2020, i.e. 259 composters accessible to nearly 5,000 households in private (residential blocks) or public areas; 22 educational composters installed in schools, 5 in village squares and 5 planned;
- only 13 of the 58 planned events were held;
- more than 300 people have been trained as composter guides since 2013;
- more than 250 people have been trained as site supervisors since 2015;
- 5 shredding operations were carried out in 4 municipalities in the local area (10 initially

programmed), 2 shredding operations were organised in waste collection centres (4 initially programmed), 1 of which was held over a whole week instead of just one day;

- for the 4th year running, the Waste Management Department coordinated the collection and shredding of Christmas trees in Nantes' 11 districts. Other Christmas tree shredding operations were also organised in the other municipalities.

In addition to the development of local composting, in December 2019, the Waste department trialled the separate collection of food waste, with the aim of rolling it out across the city by 2025. The trial was continued throughout 2020:

- 1,700 households in the Nantes Nord district have been equipped with compost buckets for daily waste sorting. 13 collection points have been set up in the trial sector; Some addresses have a door-to-door collection scheme with specific brown bins;
- food waste collected every week was sent to "Compost In Situ", a cooperative that recycles food waste by composting, in partnership with farmers from La Chapelle-sur-Erdre. Thus, food waste is given a new life and contributes to the development of a local organic recycling industry;
- nearly 17 tons of food waste were collected and recycled as compost.

The food waste prevention plan was rolled out in 2020 with:

- a trial to recover foodstuffs started at the Bellevue market in December 2020, in partnership with the city of Saint-Herblain and local associations. Every week, 3 tonnes of food waste are diverted from household waste: some of it is redistributed via associations, the rest - not consumable - is recycled as compost;
- trial of a new educational module in schools on the theme of food waste;
- the creation of a new training module on food donation actions for eco-event organisers. It completes the training programme and module on reducing food waste;
- supporting municipalities in their actions to reduce food waste through technical days or conducting a diagnosis of "food waste in school canteens";
- awareness-raising among chefs in care facilities for elderly dependants and inter-generational restaurants on the issue of waste sorting and bread collection. Note that the "gourmet bag" is being considered.

Initiatives to increase the re-use of objects left at waste collection centres and in the districts have also been continued:

- projects led by associations (district 'Ressourcerie®' re-use and recycling workshops, repair workshops, etc.) and a comprehensive study led by the Ecossolies network (financially supported by Nantes Métropole and France Active Pays de la Loire) to encourage the development of a reuse and repair sector in the region;
- the mobilisation of social housing associations, who provide premises for pre-sorting, the collection of objects and bulky items, the establishment of partnerships and the involvement of resident ambassadors. As part of the partnership between Nantes Métropole and Nantes Métropole Habitat, a new location was opened in October 2020 in the Bellevue district (bringing the number of "Ici-Tri" locations in the City of Nantes to 20).

Waste collection centres:

- closed during the lockdown period, they reopened on 4 May ahead of the general lifting of lockdown on 11 May for green waste and rubble. On this occasion, security guards were deployed control the number of visitors to the sites. Queues in public areas were managed in conjunction with the local police, the municipal police and local centres;
- operating contracts for waste collection centres outside Nantes were renewed with 3 geographical areas (operators: Brangeon, Paprec and Urbaser);
- a new contract reserved for the SIAE (inclusion through employment structure) for the

collection of objects for reuse at waste collection centres outside Nantes has been set up at 7 of the 11 waste collection centres with the installation of shipping containers (operator: Envie 44);

- a feasibility study to implement access control systems in waste collection centres was carried out;
- new collection channels have been set up: for plasterboard (at the waste collection centres in Saint-Herblain, Saint-Aignan, La Montagne and Saint-Jean-de-Boiseau) and polystyrene (at the waste collection centres in Nantes, Saint-Sébastien-sur-Loire, Vertou and Rezé)

Note the installation of defibrillators in December 2020.

Waste collection

Waste collection managed to adapt to the consequences of the health crisis: the collection of recyclable waste, which stopped on 18 March following the closure of the sorting centre, only resumed on the 1st of April for priority establishments, on 22 April for collection centres in Nantes, Saint-Jean-de-Boiseau, La Montagne and Indre, and finally, on 27 April for the entire city. We note that user support for waste collectors was high and that compliance with instructions (keeping selective collection at home before recovery when reopening) was followed.

Highlights for pre-collection 2020:

- 5,516,280 see-through yellow plastic bags and 15,451,700 Tri'sac bags were distributed;
- for "Tri'sac": 111 neighbourhood meetings (including 6 rescheduled in July and 51 cancelled due to the lockdown), 62,478 visits to the sorting counter, approximately 60 "emergency" relay points and 3 bag sales points;
- See-through bags were distributed door-to-door and at 23 municipal and metropolitan relay points;
- 1,328 underground waste bins (including 67 installed in 2020), 1,141 waste drop-off points (PAV) located throughout the metropolitan area, including 900 for glass recycling.

Focus on the expansion of sorting instructions for plastic packaging:

- to extend the collection of all plastic packaging to 1 January 2021 and to provide support for these changes, some thirty employees from waste contractors "Trait d'Union" carried out a door-to-door awareness campaign in the zones affected to explain the new instructions to residents.

Optimised treatment facilities

Nantes Métropole continues to optimise its waste treatment and recovery facilities.

As part of a drive to manage waste streams, including paid-for waste, household refuse, waste from selective waste collection, unsorted waste and green waste are treated at the Arc-en-ciel 2034 and ALCEA plants (through delegation of public service contracts).

• During the health crisis, the selective collection sorting centre closed on 16 March following the announcement of the general lockdown, before reopening on 4 May. When the sorting centre was closed, selective collections were suspended. Asked to keep their packaging so that it could be sorted and recycled when the centre was reopened, residents complied with the instructions, allowing a significant amount of recyclable waste to be recovered.

- **Arc-en-ciel (AEC) 2034:** energy recovery unit, sorting centre and solid recovered fuel plant in Couëron.

In October 2019, AEC 2034 started up the new sorting centre. Among other benefits, the facility allows all packaging to be sorted: The plant produces 11 separate streams of recyclable materials. The new line is being phased in gradually.

- **ALCEA:** an incineration plant, Tri'Sac separation centre and transfer point at La Prairie des Mauves.
- **Plate-forme de déchets verts de Saint-Herblain:** the platform belongs to Nantes Métropole and is operated by Grandjouan Saco (a subsidiary of VEOLIA) under a public contract that began on the 1st of March 2019.

Two main waste streams are collected: vegetable waste (green waste) from Nantes Métropole's waste collection centres and eco-points: 29,262 tonnes dropped off in 2020; green waste dropped off by professionals (landscapers, pruning, public works sites, etc.): 8,115 tonnes dropped off in 2020.

Other streams, from collection centres among other sources (asbestos, rubble, wood, paper, etc.), are handled through public contracts.

Glass collected at voluntary drop-off points is taken back and recycled by OI Manufacturing.

Key figures in 2019

- 300,888 tonnes collected in metropolitan France, i.e. 449.6 kg/inhabitant Excluding inert waste, the decrease in household waste per inhabitant is 9.6% compared to 2010 (444 kg/inhabitant).
- 138,722 tonnes of household waste recorded, i.e. 207 kg/inhabitant (down 25% from 279.7 kg/inhabitant in 2010).
- 12% decrease in the quantity of packaging and paper collected (53.2 kg/inhab/year in 2010 and 46.7 kg/inhab/year in 2020).
- a 21.35 % increase in the amount of glass recycled (from 28 kg/inhab/year in 2010 to 33.98 kg/inhab/year in 2020)
- 3,429 tonnes of furniture collected (compared to 3,448 tonnes in 2019).
- 259 collective composting facilities monitored by the Compos'tri association.
- 69 shredders, 19,800 composters and individual vermicomposters subsidised since 2010.

WATER CYCLE MANAGEMENT

Nantes Métropole coordinates public water policy on drinking water, wastewater and rainwater treatment, and the restoration of aquatic environments. This is referred to as the water cycle. Nantes Métropole acts on behalf of the conurbation's 24 municipalities.

Since 2001, Nantes Métropole has acted as the organising authority for the mains drinking water supply and wastewater treatment for more than 640,000 residents. It has opted for a combination of water management systems across the local area. This makes it possible to provide certified high-grade water and a single tariff for all users.

Subsidised water rates

Nantes Métropole guarantees access to water for everyone, through:

- a single water rate across all 24 municipalities since 2006;
- controlled pricing, thanks to its combination of management systems.

To strengthen solidarity, since 2016 Nantes Métropole has implemented a social pricing system aimed at facilitating universal access to water, in line with the Brottes Act of 15 April 2013.

This law guarantees that no more than 3% of residents' income will be spent on paying their water bill, at a reasonable consumption rate of 30 m³ per person, per year. This amount is calculated after factoring in household income and the composition of the family.

In 2020, more than 6,200 households were entitled to subsidised water rates, for a total amount of €401,857 in subsidies paid.

La Roche water treatment plant: 2nd phase of work launched

Built in the 1970s, this water treatment plant produces roughly 40 million m³ of water per year (representing 85% of consumption in the metropolitan area and 45% of consumption in the Loire-Atlantique region). To maintain the quality of the water and guarantee its supply over the next 40 years, Nantes Métropole has embarked on a massive upgrade programme to the tune of €85m (ex. VAT) that will continue until 2023.

After the first structures were commissioned at the end of 2017, the demolition work prior to the 2nd construction phase was completed in 2020. Construction of the last two structures began in July 2020: the new sand filters, an ultraviolet lamp process that will provide additional protection against parasites, and the treated water pumping building. They will be commissioned by the end of 2022. In addition to the initial project, the construction of a coagulant storage facility (in order to increase the level of security of supply of reagents necessary for the production of drinking water) was approved in 2020 following the context of the last 3 years (drought and pandemic).

Alongside the construction work, Nantes Métropole is working in partnership with the CSTB (the building industry's scientific and technical centre) to continually monitor the organoleptic quality of the water through its water taste monitoring centre.

Every quarter, 11 volunteer residents from the metropolitan area taste samples of the water collected at different locations across the local area. This test combines physiological measurements with the standard sensory reactions picked up by sensors, including heart rate, perspiration and cutaneous microcirculation. The aim is to detect whether the water's taste changes during the work and be able to adjust the process if necessary. The results indicate that the metropolitan participants are generally happy with the drinking water. The least popular samples are generally those with a stronger chlorine taste. A complementary study on the evolution of chlorine in water and its taste perception has been launched for 2021-2023.

Wastewater treatment: review of the master plans in progress

Launched in 2019, a review of the wastewater master plan, along with the development of a master plan for management of sludge from wastewater treatment plants are in progress. Existing data on the condition and operation of wastewater treatment systems have been collected and analysed. Measurements on the network have been carried out in high water tables (winter 2019-2020) and in low water tables (autumn 2020). These structuring data will be used to identify the challenges to be met in the more or less long term and ultimately, to define the priority work to be undertaken to address them by 2035. Managing sludge from the waste treatment process is a key issue for Nantes Métropole in terms of the various existing recovery methods, in consideration of the potential impact on the environment.

Fully equipped self-monitoring of wastewater treatment

To limit human impact on the natural environment, since 2018, self-monitoring devices have been installed on 57 stormwater discharge stations and spillways and 4 wastewater treatment plants. The aim is to gain a better understanding of malfunctions in sewerage networks and facilities. In 2020, deployment of the software to manage and bank the collected data, called METR'EAU, was finalised. It enables network operation to be monitored in real-time, malfunctions to be anticipated and makes better use of existing water quality monitoring in the local area.

Wastewater as an indicator of the spread of the COVID-19 epidemic in the local area

In response to the pandemic, Nantes Métropole and the operator Suez are contributing to the fight against the epidemic by collaborating with the [Obépine network](#) (Epidemiological Wastewater Observatory). The objective of this network, which studies the concentration of coronavirus released in stools in wastewater, is to be able to anticipate the next waves of Covid-19.

Since May 2020, effluents arriving at the wastewater treatment plant in Petite-Californie (Rezé), and since January 2021, effluents arriving at the plant in Tougas (Saint-Herblain), have been sampled and analysed by specific laboratories. As these two stations are the largest in the conurbation, more than 90% of the metropolitan population is monitored.

Ongoing support for integrated stormwater management

Will future constructions be connected to the collective sewerage system or managed under a system of private sewage disposal? What measures must be taken to limit soil sealing on my plot? The wastewater and rainwater zoning defining these rules were annexed to the Local Metropolitan Urban Plan (PLUm) and adopted in April 2019.

In the context of climate change in which episodes of heavy rain are possible, rainwater management, based on rainwater zoning rules, aims to reduce the amount of sealed surfaces. This results in the use of permeable surfacings and the collection of rainwater where it falls, so that it can be returned to the natural environment, if possible by soaking into the ground. To encourage application of these rules, technical support, training and information tools (for professionals and users) have been in place since 2020.

In 2020, work to extend the retention basin at the Pré-Poulain stream in Thouaré-sur-Loire was carried out with a dual objective: provide protection against flooding and to control stormwater.

New restoration works planned for water courses

Built around a network of green and blue belts, Nantes Métropole boasts a diversity of natural environments that are often little known to local residents. For this reason, a coherent and concerted approach to protecting, renovating and enhancing aquatic environments is being implemented, reinforced by Nantes Métropole's responsibility for managing aquatic environments and averting flood risk since 2018.

To further improve the quality of aquatic environments (objectives of the Water Framework Directive (WFD)), restoration programmes on the Charbonneau, Cens and Gesvres catchment areas (for the

next 6 years) were approved by the Metropolitan Council in February 2020. The work includes hydromorphological restoration of the watercourses, restoration of ecological continuity and removal of water bodies, which will begin in 2021. An action programme on the Grande Vallée de Bouguenais has also been underway since mid-2020, with one of the major challenges being the restoration of hydraulic functionality in various sectors.

At the end of the year, the "Ambitions for Aquatic Environments and Flood Protection" (AMAPI) study was launched. The aim is to define Nantes Métropole's ambitions for the restoration and preservation of the local area's aquatic environments and the classification of flood protection works under the responsibility for managing aquatic environments and averting flood risk. This will result in a roadmap of programmes and actions on these topics by 2033.

Revision of the Loire Estuary SAGE: Nantes Métropole voices its opinion

The revision of the Water Resources Development and Management Plan (SAGE) for the Loire Estuary is an important step in managing water in the region, with a new ambition set to restore the quality of the water and aquatic environments of the Loire estuary and its tributaries. There are 7 main challenges for this new SAGE: governance, quality of the aquatic environments, the Loire estuary, water quality, coastline, flood risk and coastline erosion, quantitative management and drinking water supply. Nantes Métropole is particularly concerned because of its numerous responsibilities related to water, as well as because of the location of this SAGE plan that covers 80% of the local area. This basic document will be a source to guide the actions undertaken by Nantes Métropole in the coming years in terms of water cycle.

Once it had been validated by the Local Water Commission (CLE) on 18 February 2020, the draft SAGE was submitted for consultation to the assemblies. It will be submitted to the public for final adoption in 2022. Nantes Métropole, as a major stakeholder in the region, has submitted an opinion on the proposed guidelines.

Key figures in 2020

- €3.51 incl. tax: the fixed rate as of 1st January 2021 per m³ of water consumed (for a standard 120 m³ bill) including drinking water, sewerage and taxes from the Loire-Brittany Water Agency.
- 114,148 m³ of water/day was produced by the La Roche drinking water plant on average in 2020.
- 2 major intermunicipal water treatment plants were found to be compliant for 2020: Tougas at Saint-Herblain (600,000 population equivalents) and La Petite-Californie at Rezé-Bouguenais (180,000 population equivalents).
- 600 km of rivers and 400 km of marshland in the local area.

PRESERVING BIODIVERSITY

The diversity of natural areas and farmland in the conurbation is a major contributing factor to the quality of life of its residents. The design phase of this "Natural city" project was outlined within the framework of the PLUm, with the aim of protecting and improving the natural and agricultural heritage and operation of the ecological infrastructures while complying with regulatory obligations and development needs. This also requires an effort to reconcile urban and economic development at the local level (particularly agricultural) with the protection of biodiversity.

To ensure these spaces are protected and enhanced, Nantes Métropole's environmental policy is structured around the following priorities:

- preserving biodiversity, wetlands and the green and blue network;
- achieving good ecological status of water bodies and restoring aquatic environments;
- developing trees and forests;
- maintaining agriculture;
- implementing a food roadmap.

Protecting and restoring the biodiversity of the local area

One of Nantes Métropole's priorities is to provide a structural, cross-cutting and shared framework for the protection and restoration of biodiversity in the area, in line with the PLUm.

Highlights in 2020 included:

- the development of a biodiversity atlas;
- an ongoing partnership with nature associations (LPO, Bretagne Vivante, Groupe Mammalogique Breton, Groupe d'Étude des Invertébrés Armoriciens), the Centre Vétérinaire de la Faune Sauvage et des Écosystèmes, the Conservatoire Botanique National de Brest and Fédération de Pêche 44) to facilitate the exchange of knowledge, practices and expertise. An survey of current knowledge about the natural environment was been carried out as part of the Atlas of Metropolitan Biodiversity project;
- preparation on implementing the area-based metropolitan strategy entitled "avoid - reduce - compensate" (ERC) by a metropolitan council decision of 13 December 2019;
- support and guidance for the consideration of biodiversity and wetlands in metropolitan projects;
- the coordination of a network of "reservoir stations" for *Angelica heterocarpa* and *Scirpus triquetus*, with conservation action plans already in place. An inventory was produced in 2020 (cumulative effects).

Expanding tree coverage and protecting urban forests.

Since 2006, Nantes Métropole has been developing an urban forest project, which is currently being rolled out on 1,400 ha of natural spaces and farmland at three sites in eight municipalities of the Nantes conurbation.

This projects aims to:

- encourage the growth of vegetation of all kinds in these areas (reforestation, hedgerows, orchards, etc.) in liaison with public and private landowners and a number of institutional stakeholders;
- develop "carbon sink" sites and green oases in the local area, which are in keeping with the energy transition roadmap and feed into the Climate, Air and Energy Plan for the Local Area;
- provide recreation areas close to urban centres where residents can discover nature.

Highlights in 2020 included:

- implementation of the master plan "The trees and forests of tomorrow", a document that sets out a framework for expanding tree coverage in the local area, both on the three urban forest trial sites and in other zones of the metropolitan area by 2030-2050. This master plan, which is the result of a consultation process with the various stakeholders in the project (landowners, farmers, user representatives, forestry and agricultural professionals, etc.), is structured around 4 strategic directions (developing and enhancing wooded areas, discovering forests, innovating from trees, doing things together);
- the continuation of a forest management plan on a site of around 50 ha, and planting and maintenance work on the other metropolitan and municipal plots;
- the continuation of educational and discovery activities on a "Tree-Wood-Forest" cycle.

Supporting and developing agriculture

Since its creation, Nantes Métropole has always viewed agriculture as a key economic activity for the balanced development of the conurbation. With this in mind, it has joined forces with the relevant partners to define and implement a shared action plan, before consolidating peri-urban agriculture in town planning documents.

In 2020, Nantes Métropole worked alongside the Chamber of Agriculture, CAP44, GAB44, Terre de Liens and SAFER to continue its action in several areas:

- welcoming project leaders: 30 project leaders were supported via a call for expressions of interest. A reflection has been carried out concerning their implementation in the local area and the creation of 15 new installations;
- contribution to the Local Food Project (PAT), particularly with regard to the first commitment "to develop food production system that contribute to the ecological transition", and consideration of the other commitments contributing to the "production of local, sustainable and accessible food for all";
- the development of organic farming, a key aspect of the first commitment of the PAT, has resulted in the "Sensibio" initiative being rolled out to 20 farmers. This initiative facilitates our understanding of the sociological, psychological and technical obstacles to organic conversion. It will result in concrete actions being implemented in 2021 (opening of organic farms, creation of thematic technical groups, execution of individual conversion diagnostics, etc.);
- support for transfers, with an approach to raise awareness among farmers in 3 municipalities (Sautron, Orvault and la Chapelle-sur-Erdre). 8 farmers have accepted this outreach and two of them expressed a wish to be supported for the transfer of their farm.

Setting out and implementing the operational objectives of the food roadmap

The year 2020 was dedicated to organising the rollout of the PAT objectives.

A scorecard to track the objectives was used as the basis for the assessment work carried out by the Conseil Métropolitain des Acteurs de l'Alimentation (CMAA). Representatives of the local food system diversity, their 22 members, from professional and associative networks, are individually committed for 3 years.

In 2020, three sessions of the CMAA were organised: a first meeting in March, a foresight consultation ("time after") in October and a meeting focused on exploring the "agriculture" priority area in December.

It should be noted that the preparation of the 2nd Territorial Conferences on Agroecology and Sustainable Food was initiated in 2020. This nationwide event is jointly organised by Nantes Métropole, the CNPFT, Terres en Villes, the Voyage à Nantes, the ADEME and the DRAAF. Initially scheduled for 2021, it has been postponed to September 2022 due to Covid-19 constraints.

Key figures in 2020

- 16,427 hectares of natural areas, i.e. 30.7% of the local area, including 9,250 hectares of wetlands (resulting from the PLUm)
- 16,772 hectares of farmed agricultural land, i.e. 31.4% of the local area (resulting from the PLUm).
- 241 farms generating 1,400 direct jobs.
- 5 EU-protected "Natura 2000" zones, covering 7,062 hectares, i.e. 13.5% of the local area.
- 31 Special Fauna and Flora Ecological Interest Zones (ZNIEFF), including 21 type I zones (small areas and home to at least one determining species or one threatened habitat) and 10 type II zones (more extensive and representative of well conserved landscape features);
- 154 noteworthy plant species (protected, rare and endangered plants) including 88 related to wetland areas and aquatic environments.
- 408 animal species.

PREVENTING RISKS AND POLLUTION

Nantes Métropole is responsible for "preventing major technological and natural risks and combatting pollution". To this end, since 2001 it has been developing a comprehensive and concerted approach to risks, pollution and nuisances, based on partnerships with all local players: the 24 municipalities, the Departmental Fire and Rescue Service (SDIS), State services, network managers and economic players, civil society and researchers. Since December 2014, Nantes Métropole is also responsible for special police matters regarding law and order in eight municipalities of the metropolitan area, including Nantes.

With a view to keeping its inhabitants safe, Nantes Métropole aims to:

- learn to live with risks and reduce weaknesses in the local area and the organisation;
- enhance the quality of the living environment and combat pollution.

Working towards a more resilient local area

The resilience of an area is its ability to manage and overcome a disaster.

At Nantes Métropole, this view of risk management and the notion of resilience entails:

- prevention, with a town planning policy that factors in the risks;
- forward planning, with crisis management plans at both municipal and inter-municipal levels.

Key measures:

- assistance provided by Nantes Métropole to the 24 municipalities in drawing up Local Contingency Plans (PCS): 22 municipalities adopted their PCS at the end of 2020 and the 2 remaining plans are underway;
- Local Area Emergency Response Plan (PIC): this enables metropolitan departments to respond rapidly in the event of exceptional circumstances (fire, road traffic problems, interruptions to the water supply, severe storms, flooding, bomb scares, etc);
- the principle of continuous improvement, with emergency drills, training for elected representatives and metropolitan employees, and knowledge building from feedback in order to strengthen emergency preparedness.

Risk and crisis management initiatives

Nantes Métropole has three specialised departments to organise its action on the ground:

- CRAIOL: a call centre with a dedicated telephone number to contact Nantes Métropole, available to all local institutional stakeholders 24/7. An operator responds to urgent requests, analyses the request and information given (level of urgency, context and ownership) and triggers the necessary actions (request for call-out, decision, information from departments, etc.). They also manage spikes in calls in the event of major incidents and provide support in the event of an emergency;
- The Prevention and Risk Management Unit: an operational team that responds to disasters occurring in the Nantes area and provides support for crisis management coordination. Usually working alongside the emergency services, this team takes all emergency measures to safeguard the victims of disaster. In the event of a major incident affecting another municipality of Nantes Métropole, the unit is tasked with lending assistance, where necessary, to the relevant municipal organisation.

The teams of CRAIOL and the Risk Prevention and Management sector were especially active in 2020 in the context of the Covid-19 pandemic, notably concerning:

- logistical management of staff health protection equipment;

- coordination of Business Continuity Plans, Business Recovery Plans, preparation for the second wave;
- coordination of a Covid-19 network with all 24 municipalities.
- The Environmental Operational Risk Prevention Unit (COPRE): an operational team of technicians tasked with combatting pollution (of water, air or ground) and preventing industrial risks across the local area; The hub of exceptional partnerships with the SDIS 44 fire-fighters and the DREAL, the COPRE has the means to respond and investigate in order to assess and deal with any environmental damage affecting the local area. It should be noted that since 2020 and through an agreement, the COPRE's operational activity has been extended to the local area of the five inter-municipalities of the Nantes Saint-Nazaire metropolitan cluster.

Additionally, in fire prevention matters, Nantes Métropole works alongside fire-fighters and mayors to adequately address the risk and maintain the network of 7,030 public and 788 private fire hydrants installed across the conurbation in good working order.

NB: Since the 1st of January 2015, the metropolitan and city of Nantes' dedicated risk management and civil security resources have been pooled with the Risk Prevention and Management Unit, which steers the public risk prevention and management policy implemented by the City of Nantes and Nantes Métropole.

Lastly, Nantes Métropole manages the inter-municipal pound, delegated by an agreement to the Société Protectrice des Animaux animal welfare charity.

Local application of the EU floods directive

Under the EU floods directive, 11 municipalities in the metropolitan area are identified as "major flood risk areas". With this in mind, a local flood risk management strategy (SLGRI) was adopted in 2018. As part of this strategy, a 29-point Flood Prevention Programme (PAPI) for the lower Loire River was set up between 2018 and 2021 to reduce the impacts on the local area of major flooding of the Loire River.

Emerging risks and pollution: contributing to the health of inhabitants

To combat emerging risks and air pollution, Nantes Métropole has adopted overarching strategies to improve the quality of the living environment:

- Health, Safety and Environment Regional Plan "3", and Local Health, Safety and Environment Action Plan for the Nantes area;
- The Atmosphere Protection Plan, playing an active part in the studies and work being carried out by Air Pays de la Loire, which is responsible for monitoring air quality.

With regard to noise abatement, Nantes Métropole has drawn up its draft plan for the prevention of ambient noise in accordance with a European directive. The plan consists of a series of initiatives that aim to avert, reduce and rectify the effects of noise pollution.

Regarding the installation of mobile phone towers in its local area, Nantes Métropole is working with the stakeholders concerned to implement a charter on the terms and conditions for installing radioelectric stations. The aim is to enable the continued development of digital technology across the local area, since this is a vital drawcard.

Video protection: helping to protect and manage public space

Inter-municipal cooperation to rationalise resources and optimise the system

Under the NOTRe Act and a pooling arrangement between Nantes Métropole and the 24 municipalities, a working group set up with 10 municipalities has identified the needs to provide video protection coverage for certain public spaces.

Given the need to protect people and property, and in view of the complexity and dynamic management requirements of current networks, it was clearly preferable to act collectively, pool resources and share costs.

Accordingly, it was suggested that the interested municipalities set up a metropolitan urban surveillance centre as part of a metropolitan shared service.

The aim of this scheme is to develop a carefully thought-out, coherent, compatible and scalable system of video protection, while ensuring the installation of cameras in the local areas of affected municipalities. By joining the pooled service, the participating municipalities will enjoy the benefit of technical support for installing, operating and maintaining the cameras, on one hand, and pooled operating and maintenance costs, on the other. Nantes Métropole also financially contributes to setting up the network of cameras installed in their local area.

Four municipalities have opted to join the pooled service:

- Nantes (138 cameras);
- Saint-Herblain (22 cameras);
- Rezé (12 cameras);
- Vertou (12 cameras).

A system dedicated to protecting and managing public space

The installation of the metropolitan area's urban surveillance centre, set up on 16 April 2018, was accomplished in strict compliance with the applicable regulations on video protection. Additionally, participating municipalities can also opt to draw up a charter and/or set up an ethics committee to ensure that individual freedoms are upheld.

The cameras connected to the CSU (Urban Surveillance Centre) are used solely for the purpose of public spaces that tend to experience significant levels of crime and heavy user traffic (urban core areas, transport hubs and shopping districts). Specific sites deemed to be at-risk due to their spatial configuration or a specific vulnerability, may also be equipped with cameras.

Video protection in public spaces addresses the following objectives:

- improve the management of public spaces and the safety of people and property;
- provide a more adequate response to society's demand for safety and crime prevention;
- combat the sense of insecurity;
- assist the police force and the gendarmerie with their investigations;
- help keep people safe.

Providing comprehensive, continuous, shared handling of public order issues

The urban surveillance centre is tasked with:

- receiving video feeds from the cameras in municipalities: 15 specialised operators control the cameras on a live, 24/7 basis;
- addressing public order concerns in general, regardless of the time of day or night;
- working in close collaboration with law enforcement (reporting criminal offences, carrying out searches) and contributing to citizens' personal safety;
- extracting images on judicial requisition (keeping them for 15 days) and forwarding images as and when received to the police headquarters in Nantes.

A complementary scheme: video protection of public buildings

At the municipalities' request, Nantes Métropole launched a call for tenders via a purchasing consortium to equip public buildings with video protection. Notice of the contract was published in December 2018.

16 municipalities joined the purchasing consortium, namely Basse-Goulaine, Bouguenais, Brains, Couëron, Indre, La Chapelle-sur-Erdre, Les Sorinières, Nantes, Orvault, Rezé, Saint-Aignan de Grand

Lieu, Saint-Jean-de-Boiseau, Saint-Léger-les-Vignes, Saint-Sébastien-sur-Loire, Sainte-Luce-sur-Loire and Vertou.

Key figures in 2020

- 22 Local Contingency Plans.
- 15,645 calls handled by the CRAIOL call centre (9,250 incoming calls and 6,430 outgoing calls);
- 142 COPRE operations to deal with environmental pollution, 151 on-site preventive inspections and files, and activities performed.
- 1,389 flow rate/pressure checks.
- 32 hydrants installed, 146 hydrants replaced, 41 hydrants repaired or moved.
- 89 hazard procedures initiated, 14 of which were followed by public orders.
- 430 RF radio repeaters in the Nantes Métropole area (pylons, water towers, churches and buildings).
- 5 inter-municipal technical committees in charge of approving proposed sitings of installations in the metropolitan area.
- 695 RF radio stations (antennae for radio infrastructure operators).

Urban Surveillance Centre (CSU):

- 138,355 video patrols conducted by the urban surveillance centre.
- 685 video viewings carried out by urban surveillance centre operators at the request of law enforcement.
- 546 image extractions performed in response to a court order.