

## **RATP GROUP-OPERATED BUS SERVICES**

1906 First Brillié-Schneider omnibuses deployed in Paris, on the route that linked Montmartre to

Saint-Germain-des-Prés

1946 Reopening of 11 bus routes in Paris, and 55 in the suburbs

Noctambus, first night bus service in the Île-de France region

Conversion of the first standard bus route to electricity in Paris

Complete takeover of the Tuscany-region urban and intercity bus network

buses deployed worldwide

Close to

by electricity, biogas and hydrogen) worldwide

**30,000** employees dedicated to bus operations worldwide

annual journeys worldwide

13,000

# operations, maintenance

Road transport, whether by bus in a densely populated environment, or by intercity coach, occupies its own **space in the city landscape,** yet it interacts continuously with the workings of the city, and its infrastructure. As a versatile, innovative transport mode, buses are currently one of the largest contributors to the energy transition in mobility. Designing, operating, maintaining, and upgrading a transport mode that is as intertwined in the life of regions, requires the expertise and coordination of various teams, and a systemic approach. RATP Group has been the long-standing operator of the bus network in Paris and its inner suburbs. As the preferred mobility partner that local authorities and transport authorities turn to, the Group has acquired unique experience in this extremely dense urban environment, and a foothold across the various links in the bus value chain. Today, through its dedicated subsidiaries RATP Cap Île-de-France and RATP Dev. RATP Group deploys its integrated expertise to the benefit of the regions in which it operates. Be it in the Île-de-France region, in France, or abroad, the Group designs, operates, and transforms networks to rise up to the major environmental and societal challenges of the day. Being a pioneer in the bus energy transition, RATP Group joined forces with Île-de-France Mobilités, with the financial backing of the European Commission, to successfully roll out the most ambitious European bus programme, Bus2025. At the same time, the Group continues to expand the foundations of its expertise, through a unique community of bus industry specialists that spans the globe.

## RATP Group bus industry expertise

88%

# of passengers have reported being satisfied or very satisfied with the service provided by Autolinee Toscane, RATP Dev's subsidiary operating the Tuscany-region



### IN THE ÎLE-DE-FRANCE REGION

13

**bus depots**have been converted
to accommodate
fully electric buses

12

**bus depots**have been upgraded
to accommodate
biomethane buses

# **Guaranteeing service quality**

Passenger information, driving comfort, service continuity, frequency, cleanliness on board buses, and a seamless transition between transport modes, are some of the everyday factors that influence the passenger experience. Customer feedback matters to RATP Group, which is committed to continuously improving the quality of service provided on the networks that it operates. The Group's approach combines human sensitivity through drivers and inspectors, with digital efficiency through smart devices, with a personalised presence through local stakeholders.

# Successfully leading the energy transition

In order to convert bus fleets to cleaner energy sources, industrial machinery, rolling stock, and bus depots have to undergo a complete transformation. Through Bus2025, RATP Group has implemented an ambitious programme on behalf of Île-de-France Mobilités, and with the support of the European Union, that has since become a global benchmark. On a broader scale, the Group works with leading energy suppliers to trial and deploy eco-friendly innovations using new energy sources, with the goal of accelerating the transformation of mobility.

# **Operating networks** in France and abroad

Through its subsidiaries RATP Cap Île-de-France and RATP Dev, RATP Group operates bus networks of varying scales in France and abroad. In France, the Group assists local authorities in operating and developing efficient, sustainable bus services that are perfectly suited to the region's specific geography and demographics. Across the globe, RATP Group is the mobility partner of choice in Tuscany, Italy; approximately 30 cities in the United States; Casablanca, Morocco; as well as in Riyadh, Saudi Arabia, either to upgrade existing networks, or to design decisive transport projects from beginning to end that transform the way transport is used in cities.

80

### routes

form the new Riyadh bus network, which is deployed and operated by RATP Dev in conjunction with its Saudi partner SAPTCO



**1,300 bus drivers**were hired by RATP across the Île-de-France region in 2024

# Advising urban public transport stakeholders

RATP Group has chosen to leverage its expertise in bus operations by creating a hub to centralise its extensive skills and knowledge in bus engineering. The expertise hub, which is based at the Group's headquarters in Paris, comprises long-standing engineering teams from the overground network across the Île-de-France region. These teams serve many goals: offering advice, pooling resources, and refreshing skills by providing technical support to various clients (transport authorities, local authorities, subsidiaries, and other entities).

# Facilitating mobility at the heart of regions



RATP Dev operates the urban and intercity bus network across the Tuscan region

As part of an everyday commute or an occasional journey, buses are the most versatile transport mode, which can be adapted to a wide range of environments, from extremely dense cities to the most rural areas. Taking into account the expectations of transport authorities and local authorities. RATP Group bus divisions have developed custom bus service offerings that can be scaled to residents' requirements, in locations as varied as Paris, Riyadh, Lorient (France), and the Saclay plateau (France). These teams are also mobilised for major events, as they have shown through their contribution to the Olympic and Paralympic Games Paris 2024.

# Mobilising

## a community of experts for public benefit

Drivers, inspectors, traffic regulators, and maintenance operators are part of the human network powering the bus industry, which mobilises very specific skill sets. With a role in every step of the bus value chain, from the design phase to operations, RATP Group coordinates and integrates its renowned expertise in various fields. This expertise is deployed through Group subsidiaries in France and worldwide, to increase the efficiency of networks of every size, and to provide a high-quality passenger experience. Through training programmes, the Group invests heavily in developing these areas of expertise, with which it has stood out and led the industry.





Patrice Lovisa, Overground Networks Business Unit Director, RATP Group

INSIGHT FROM THE EXPERT

"One of RATP Group's strenghts is its foothold in every aspect of bus operations. For many years, we have developed the habit of sharing best practices and professional support among central teams and our local subsidiaries, which operate bus networks across the globe. The efficiency, safety, passenger relations, and innovation that constitute our brand are some of the qualities that have won the trust of transport authorities and regions. These same qualities are why we are the preferred partner of choice to develop custom bus service offerings that fit perfectly into the mobility ecosystems of today and tomorrow."

# Reimagining

## buses for better journeys tomorrow



RATP Dev operates the Angers bus network (France)

Bus transport is one of the vectors that will accelerate the energy transition in our cities. As such, industrial equipment and infrastructure are quickly being remodelled across the globe today to power buses with electricity, natural gas, and hydrogen. RATP Group was one of the earliest operators to do so, through a key programme: Bus2025. Buses have proven to be a driver of innovation, transforming themselves, urban mobility, and even cities, and in the process, opening a new chapter in their industrial evolution.

# Facilitating regional mobility

As an overground transport mode, buses come in continuous contact with the city's activity, and with other users of public areas. Having gained extensive experience in operating bus routes in dense urban environments, RATP Group relies on its specific on-the-ground knowledge to deploy bus service offerings in a very wide range of regions.

#### **REACHING REGIONAL CENTRES**

As the long-standing operator of the Paris bus network, RATP Group has honed its expertise in an extremely dense urban environment that experiences frequent disruptions, works, protests, and various incidents, while guaranteeing the round-the-clock operation of bus routes in Paris and inner suburbs. Backed by over a century of experience, the Group leverages its culture of excellence to serve regions of all sizes and layouts, in France and abroad: in urban and suburban settings, mid-sized cities, large cities, and rural areas. The preferred mobility partner of transport authorities and local authorities, the Group deploys a wide array of skills that range from the design and operation of bus routes to maintenance, and the definition of technical specifications in the purchase of rolling stock.

Victor Ganivet.

Deploying operational expertise in France and worldwide

**(7**)

RATP Group's international presence

- A. The United States of America
- **B.** The United Kingdom
- C. France
- D. Belgium
- E. Switzerland
- F. Italy
- G. Morocco
- H. Saudi Arabia
- I. South Africa

## RATP Group-operated networks across France

#### 1. Brittany

Urban networks: Brest, Lorient, Quimperlé, and Quimper Intercity networks: RD Breizh

#### 2. Pays de la Loire

Urban networks: Angers, Laval, and La-Roche-sur-Yon Intercity networks: FlexCité 49

#### 3. Centre-Val de Loire

Urban network: Bourges Intercity networks: Cars Dunois, RD Berry, and STI Centre

#### 4. Nouvelle Aquitaine

Urban networks: Brive-la-Gaillarde, Saintes, and Pays-Basque Ardour

#### 5. Occitania

Urban network: Narbonne

#### 6. Provence-Alpes-Côte d'Azur

Urban network: Toulon

#### 7. Grand Est

Urban networks: Epernay, Charleville-Mézières, and Champagne Mobilités Intercity networks: STDM

#### 8. Île-de-France

Urban networks: Paris, and inner and outer suburbs

## 9. Auvergne-Rhône-Alpes

Urban networks: Vienne, Aix-les-Bains, Annemasse, Saint-Julien-en-Genevois, and Thonon-les-Bains Intercity networks: Alpbus

#### 10. Normandy

Urban network: Caen

#### 11. Hauts-de-France

Urban networks: Creil, Laon, and Boulogne-sur-Mer Intercity networks: RIO4, Autocars Finand, Lebas Laridant, Les cars Charlot, and Voyages Taquet

INSIGHT FROM THE EXPERT

"Bus networks are designed and operated by continuously keeping the lines of communication open with local authorities and their technical divisions, and with the transport authority, to develop itineraries, anticipate road works and the installation of bus stops, and more.

Buses are directly involved in the life of a region, and notably in the mobility infrastructure, pedestrianisation facilities, and the opening of bike paths."

Operations Director,

Business Unit.

RATP Group

Overground Networks

## BUS TRANSPORT, A FLEXIBLE SERVICE OFFERING FOR EXPANDING REGIONS

Accurate knowledge of local considerations is required in order to design, operate and upgrade a bus network. This involves ongoing dialogue with local authorities, transport authorities, and stakeholders, which allows the Group to develop suitable mobility solutions, and to adopt a proactive approach when these solutions have to be adapted.

In Riyadh, RATP Dev commissioned the Kingdom's first bus network. Boasting 80 routes that provide more interconnection with the newly opened automated metro network, the bus network realises Saudi transport authorities' ambitions of transforming mobility in a capital where individual car use reigns supreme. In the United States, bus networks are deployed in the midst of discussions over the adoption of new energy sources. In cities that have long been served by buses, both cities and buses have to keep up with the times. In 2019, the Paris bus network went through an unprecedented transformation. For the first time in 40 years, the itineraries and schedules of 50 bus routes were completely revised and implemented overnight. Elsewhere, less spectacular changes have been made to keep pace with regions and their mobility solutions. When a hard transport mode is built, such as a metro or tram line, bus routes are revised to more efficiently channel traffic to new stations. This was the case during the extension of Paris metro line 11, and the commissioning of two new tram lines in Angers (France). The more buses adapt to the public's needs, the stronger their role in social empowerment. Take Quimperlé, in France's Brittany region, for example. RATP Dev improved the Quimperlé bus service offering to serve the region more efficiently by extending service hours, and expanding demandresponsive transport in less populated sectors of the urban area.

## COLUMBIA, AIMING FOR EXCELLENCE

Columbia, South Carolina (USA) designated RATP Dev USA to operate and maintain The COMET, the city's bus network (regular bus routes, and demand-responsive transport for people with reduced mobility). The subsidiary advised local authorities on how to restructure the network serving over 130.000 residents, and improved punctuality by 37% as a result.





RATP Dev operates the BRT bus network in Casablanca

## CASABLANCA: BUSES AND TRAMS, A WINNING COMBINATION

In Casablanca, RATP Dev Casablanca, which operates a tram network that extends over more than 70 kilometres, enhanced the interconnection of transport modes by launching two Casabusway BRT routes. Casabusway relieves traffic congestion while providing smoother journeys in the Moroccan financial capital.



80

**routes,** including 3 Bus Rapid Transit (BRT) routes

**840** 

**2,700** 



BOUCLE NORD

DE SEINE AND BOUCLES

DE MARNE CONTRACTS

AWARDED TO RATP CAP

ÎLE-DE-FRANCE

In November 2024, RATP Cap Île-de-France won two out of three tenders during the first assignment of lots when bus network operations in Paris and the inner suburbs were opened to competition. In recognition of the Group's expertise in bus operations, these early wins demonstrate how much trust Île-de-France Mobilités places in the Group subsidiary's commitments to maintaining the highest level of public service quality.

## BUS RAPID TRANSIT, MAKING A DIFFERENCE IN THE MOBILITY ECOSYSTEM

BRT systems, which have dedicated lanes and priority at traffic lights, guarantee regular and higher service frequency, and they are equipped to carry a large number of passengers. As an efficient and high-volume transport mode, they supplement standard bus services in an urban transport network. This is the case with the 20-kilometre Trans-Val-de-Marne route in the Île-de-France region; two BRT routes in Bayonne (Basque Country region); the Casabusway service in Casablanca; and in Riyadh, where RATP Dev operates three such routes, with a combined coverage exceeding 85 kilometres.

Express Bus Services are also steadily growing in popularity, notably in the Île-de-France region, thereby facilitating the modal shift. The Group's expertise in this area extends not only to the design of such routes (itineraries, service offering level, insertion in interchanges, and more), but to their operation and maintenance as well. As these express routes gain momentum across France, the Group's reputation as a partner of choice puts it in a position to advise transport authorities in projects of this nature.

## PARIS-SACLAY URBAN COMMUNITY, CONTINUOUS DIALOGUE

To provide better passenger information, gather passenger feedback, and determine the optimal location of bike parking areas close to stations, RATP Cap Île-de-France works closely with local authorities and the

region's key stakeholders. The subsidiary holds monthly meetings with Paris-Saclay University to analyse pain points, and anticipate upcoming works. In this vast region, the flexibility of bus services is a strong asset, as shown by the extension to bus route 199, which was deployed in record time to serve the Paris-Saclay hospital.



**David Belliard,** Deputy Mayor of Paris

"Over the past several years, Paris has been doing its part to address climate change. by leading a revolutionary shift to more active, collective mobility options that generate less carbon. The city's ecological transition could not succeed without investment in bus services. Buses are an inclusive transport mode that is notably used by the more vulnerable sections of the population: people with reduced mobility, working-class commuters. senior citizens, and others. Last June, we signed a protocol agreement with RATP and Îlede-France Mobilités to share an assessment of the situation. discuss our facilities, and work on traffic issues that need to be resolved. I am pleased to note that the unprecedented approach has started to bear fruit, because buses are one of the first steps in the move towards an eco-friendly and inclusive city!"

## ORDINARY BUSES SERVING EXTRAORDINARY PURPOSES

Despite being an everyday transport mode, buses can accomplish the extraordinary. One of RATP Group's proven areas of expertise is the ability to deploy replacement transport services during ongoing works on heavy modes of transport (metro and commuter rail). This expertise is notably deployed during upgrading and extension works on metro lines. The Group's teams are also capable of scaling bus service offerings during cultural events, such as the Lorient Interceltic Festival, and the *Printemps de Bourges* and *Jazz à Vienne* music festivals. Through its Origami service, RATP Cap Île-de-France provides custom solutions that range from school buses to demand-responsive transport during major events such as COP21, the 2023 Rugby World Cup, and the Olympic and Paralympic Games Paris 2024.



 $A\ temporary\ 22\text{-hectare site in Aulnay-sous-Bois}\ (France)\ that\ was\ built\ for\ the\ Olympic\ and\ Paralympic\ Games\ Paris\ 2024$ 

## FOR THE OLYMPICS, A BUS DEPOT THAT DEFIED ALL NORMS

During the Olympic and Paralympic Games Paris 2024, Île-de-France Mobilités provided accredited visitors with a dedicated bus fleet, which was parked at Europe's largest temporary bus depot. mobility project was entrusted to a consortium comprising RATP Real Estate (an RATP Solutions Ville subsidiary), and RATP Cap Île-de-France, through its Origami service. The consortium's role was to commission and operate the depot, and streamline bus traffic, while also ensuring the proper working order

The norm-defying

of operations and maintenance facilities for the various transport operators involved, as well as for the Paris 2024 committee and île-de-France Mobilités. With the cooperation of surveillance teams, and police authorities, the consortium also had to guarantee the safety and security of the highly sensitive site.

**AULNAY-SOUS-BOIS** 

200,000

officials, including 15.000 athletes

900

**buses** from various transport operators

2 200

...

1

# Mobilising a community of experts for public benefit

The human factor plays a central role in the operations of a bus network, a field inherently requiring human expertise. Technical and interpersonal skills combine to create operational efficiency, and a high-quality passenger experience.

## A COMMUNITY OF COMMITTED EXPERTS STEERING BUS OPERATIONS

RATP Group is involved in every link of the bus value chain. During the design stage, its teams run thorough diagnoses to identify the region's needs: where buses are necessary, which needs have to be met, and at what frequency. Teams also determine the human and physical resources that need to be mobilised to guarantee the optimisation and competitiveness of the transport offering. Drawing from their extensive knowledge of rolling stock supplied by various manufacturers and from their recognised experience in managing major fleets in the Île-de-France region, in Italy through Autolinee Toscane, and in the Basque Country region through the Txik Txak Littoral (coastal) network, these teams are also equipped to advise transport authorities in their projects and investment decisions, from preliminary studies to the construction of infrastructure.



Teams from
the CRIV division
(centre de régulation
et d'information
voyageurs, traffic
regulation and
passenger information
hub) regulate and
coordinate bus traffic

## CHAMPIONNET, A HOTSPOT OF EXPERIENCE

In Paris'
18<sup>th</sup> arrondissement, the
250 employees at RATP
Cap Ateliers Championnet
are experts from over ten
professions with a mission:
troubleshoot and ensure
multi-manufacturer,

multimodel maintenance on buses, industrial equipment, and integrated equipment with the aim of enhancing transport services in the Île-de-France region. Teams coordinate in order to shorten vehicle downtime, with mechanics being deployed for on-site operations.



### SPECIALISING IN VEHICLES FROM A TO Z

As rolling stock has an average life span of 15 years, its upkeep is an essential aspect that determines a bus route's efficiency, and passenger service quality. Teams from over 40 professions work together to conduct vehicle maintenance at RATP Group. The Group also deploys cutting-edge skills in maintaining built-in devices, ticket validators, dynamic passenger information screens, as well as cameras and counters.



Fabien Plazanet, CRIV Division Director, RATP Group

"From the time it was created in 2014, the CRIV, which is the central control tower that oversees the Île-de-France regional bus network, has been driving our operational efficiency. The CRIV coordinates the operation of 330 bus routes, by relying on tools that have been specified and developed by the Group's teams of industrial experts and information systems. In addition, the hub works closely with local authorities (city halls, police prefectures, and others) to provide quick responses to incidents and particular events that may cause traffic disruptions. By being in direct contact with drivers, our traffic regulators respond in real time to maintain the regularity of bus services, while passenger information officers implement over 150 diversions daily, update information terminals, and inform bus drivers of these changes. Traffic regulation in an extremely dense urban environment is a unique skill that RATP Dev teams have exported to the Riyadh bus network."

### **SERVICE OUALITY STARTS** WITH TEAM TRAINING

Drivers and inspectors are on the front line of passenger safety and high service levels. Bus teams are trained in-house, which is a consistent choice across the Group, from RATP Cap Île-de-France to RATP Dev, in cities as diverse as Mantes-la-Jolie (France) and Riyadh. For their first 10 days on the road, new drivers are coached by experienced mentors before getting green-lit to drive unaccompanied. Over the course of their careers, drivers continuously practice and perfect their driving skills in a dense urban environment. In addition to being trained in road safety and accident analysis, drivers also apply energy-efficient driving principles. As frontline providers of passenger information, drivers and inspectors are trained on how to speak to members of the public in tense situations. They are also trained to recognise and combat sexual and gender-based violence and harassment across the network.



### NEF. THE BUS ACADEMY

Initially dedicated to the various professions in overground network operations across the Île-de-France region, RATP's NEF (nouvel espace de formation, new training hub) now trains future employees in France and abroad in the various professions that contribute to bus operations. These include drivers, inspectors,

traffic regulators. and overground network engineering specialists. The NEF's customized basic and advanced training courses reinforce the skills of Group subsidiary teams, notably those at RATP Dev and Cap Île-de-France. NEF instructors have also led missions in Rivadh. Saudi Arabia, to oversee the training of bus drivers. and in Lorient (France) to train inspectors.



interns trained by the NEF on average every year

experienced instructors

training vehicles



Valentine Cuni, Chief Transformation Officer, Bus Division, RATP Group

"The opening of Paris bus operations to competition, which began in 2025, is an unprecedented situation in a dense urban transport network. RATP Group has set up a dedicated team to advise affected employees, and guarantee service quality during this transitional period. We visit each bus depot to address employees' queries on the impact that the opening to competition may have on their employment status. A network of ambassadors has also been deployed to liaise between the central Transition team, and local teams in operational units. These ambassadors help define communication and support plans that aim to meet employees' expectations as closely as possible."

## LOOKING OUT FOR BUS EMPLOYEES

Les bienveillantes (those who care) is a course that is conducted at bus depots to train drivers and inspectors in gathering statements from colleagues who have been victims of harassment and violence on the job.

## WELCOME ABOARD FOR A COMFORTABLE PASSENGER EXPERIENCE

Drivers are the face of service quality on board a bus. Together with ticket inspectors, bus drivers contribute daily to the quality of the on-board experience, by ensuring safe and stress-free journeys, preventing fare evasion, giving passengers information, and sometimes, providing reassurance simply by being there. Digital systems, scrolling screens, and dynamic information terminals at bus stops also play a part in creating a comfortable journey. Innovation in these areas is a continuous process. In Paris, as part of a three-way agreement between the City of Paris. RATP and ICDecaux subsidiary Sopact, the 10,000 screens that are currently installed at bus stops will be replaced in phases from 2025 and 2032. The new screens will display waiting times for the next bus, crowd levels on board, and other information on traffic conditions. And that's only the beginning. In Brest (France), RATP Dev trialled the roll-out of a contactless stop button, to reduce the risks of transmitting viruses during the Covid-19 pandemic. The innovative system, which is known as "HoloStop®", was developed exclusively for RATP Group by start-up MZ Technologie.





TAC, the Ardenne (France) urban area transport network, is operated by RATP Dev

#### ONE MODE FITS ALL

Buses are the transport mode that anyone can easily access: seniors. families, passengers with luggage, people with disabilities or reduced mobility, and everyone else. With thorough knowledge of the applicable standards and rules, accessibility criteria can be factored into the design of a bus route to include dedicated facilities. Currently, 100% of bus routes in Paris, and 87% of suburban bus routes, have been declared accessible. In addition, 16 bus routes across the Île-de-France region have been awarded S3A(1) certification. This means that their employees have been trained to accommodate and assist people with intellectual and mental disabilities.

(1) Accommodation, assistance and accessibility



#### STRESS-FREE TRAVEL

The guarantee of stress-free travel is one of the key aspects that contribute to the attractiveness of buses. RATP Group has developed various initiatives to address the safety issues that are specific to bus transport. To assist and reassure passengers, mobile security teams patrol buses, while security officers are dispatched on the Noctilien night bus service. Drivers and inspectors on the Paris bus network have been trained to manage conflict situations and assist victims of harassment and sexual assault on public transport. In addition, since summer 2023, 255 bus routes in the Île-de-France region have been allowing passengers to request stops between designated bus stops, in evenings after 10 p.m., a much-welcome change for passengers, notably those living in suburban and less populated areas.

## **Our projects**



## Paris-Saclay urban community - A QR code for passengers to stay informed

In the outer Paris suburbs, not all bus stops are fitted with passenger information terminals. To provide real-time information on bus routes in the Paris-Saclay urban community. RATP Cap Île-de-France has devised an aqile innovation that displays a QR code at every bus stop, allowing passengers to know when the next bus will arrive, the location of the next bus, and crowd levels on the bus. The innovative system is now deployed on routes in the Mantois and Bièvre networks.

## **Mantois – Explaining** public transport to secondary-school students

RATP Cap Île-de-France, which has a subsidiary that operates the bus network in the Mantois area, has developed a targeted communication campaign aimed at secondary-school students, who are becoming independent, and beginning to take public transport on their own. The area's secondary schools received information on tickets, student travel passes, the routes serving the schools, as well as the RATP Cap Île-de-France representatives that secondary schools can contact.

## Île-de-France region -**Autonomous buses** tested in real-life conditions

France's first autonomous 12-metre-long bus completed a journey on route 393 in the Val-de-Marne department. This initial trial, which was launched by the Group, concluded with the bus carrying passengers on board. In the dense urban environment of Paris, an autonomous inter-station shuttle linked Gare de Lyon, Pôle de Bercy and Gare d'Austerlitz train stations. With the deployment of these autonomous bus trials on the road, RATP Group plans to expand its passenger service offering in the future. Olivier Vitkine. Corporate Development Director, RATP Cap Île-de-France

"We design mobility services for each region, based on an accurate diagnosis of the needs expressed by residents and businesses, and new commuter habits with the prevalence of remote work. And we optimise intermodal travel with heavy mode networks. Major efforts have also gone into road improvements. to make it easier for buses to get around, thereby increasing the attractiveness of bus routes. Buses can also adapt to urban projects and changes; existing networks can be upgraded in a matter of months."



Federico Tonetti, Senior Vice President, Italy Business Unit. RATP Dev

"Tuscany is now Italy's leading region in terms of bus ridership, reaching 95% of pre-Covid levels, compared with 80% in the rest of the country. We have invested heavily in marketing and technology to encourage passengers to adopt new habits, and opt for the bus. We have launched marketing campaigns targeting passengers, in partnership with big names like Visa. and we have optimised our ticket sales system, with a new website that now has over 410.000 users. A new mobile app, which was launched in April 2023 and downloaded 1.3 million times, further improves the passenger experience. Tip Tap, our contactless payment system, was rolled out in March 2024, and has already attracted 4 million users, with 6.000 devices on board our buses."



## Italy – A regional network's makeover

In November 2021, RATP Dev subsidiary Autolinee Toscane took over the concession for public transport in the Tuscan region, which was previously managed by 22 companies. Autolinee Toscane operates 965 bus routes, with a 2.700-vehicle fleet covering a total distance of 110 million kilometres each vear. With €340 million invested over three years, Autolinee Toscane has committed to upgrading the network, first by replacing rolling stock, recruiting 1,200 people through innovative recruitment campaigns, and deploying technologies that have improved service and passenger information. Its goal is to provide a simplified. comfortable, eco-friendly and innovative sustainable form of local transport that meets some of the highest service standards in Europe.

**TUSCANY** 

bus stops Close to bus route



# Reimagining buses for better journeys tomorrow

Bus networks are part of an urban ecosystem in which multiple ecological, financial, and societal considerations converge. To successfully transform these networks, a global approach such as the Bus2025 programme in Paris region is required, combining the energy transition, technological innovation, and urban development.

## **BUS2025, AN INDUSTRIAL, ECOLOGICAL, AND HUMAN FEAT**

Launched in 2015, the Bus2025 industrial adventure is now a benchmark in Europe and beyond, allowing RATP Group to acquire unique expertise in the energy transition of an overground network. Through this programme, Île-de-France Mobilités and the Group have committed to a major technological and ecological development, to convert the vast majority of the RATP-operated bus fleet to electricity and biomethane by 2025. This is an ambition that is backed by the European Commission, which has allocated close to €55 million to the project since 2020, including subsidies supplemented by a loan from the Caisse des Dépôts et Consignations for the same amount. With Bus2025, the Group is contributing to urban resilience, and helping to make the Île-de-France region quieter and less polluted, by halving CO<sub>2</sub> emissions generated by bus traffic. This unprecedented transformation, which has a simultaneous impact on bus fleets, infrastructure and operating processes, was carried out without any major service disruption, owing to the coordinated collaboration of the Group's business units.









## **NEW ENERGY SOURCES REQUIRE NEW** MAINTENANCE METHODS

The conversion of bus infrastructure and vehicles to electricity or biomethane changes the way maintenance is conducted. Bus maintenance operators across the Île-de-France region have been trained in these technologies, and to support their upskilling as part of the Bus2025 programme, a dedicated team assists bus depots on demand in complex diagnostic and maintenance operations.



Nicolas Cartier, Maintenance Director. RATP Group

"Energy conversion works on bus depots are carried out while the sites are still in operation, which generates a large number of operational interfaces between the project teams, and the operations and maintenance teams. Our operating processes have been tried and tested, with the installation of temporary parking facilities. At the same time, we have supported change management for our employees, with the introduction of the required training and certification courses to maintain new equipment, in line with the applicable regulations in force. These skills are centralised at the Group's construction expertise hub."

## A LARGE-SCALE INNOVATION LAB

The Bus2025 programme has provided an excellent opportunity for various technologies to be trialled, which the Group has leveraged to explore various ways of reducing energy consumption and optimising energy use, in partnership with other leaders in electric bus recharging and smart charging. The night-time recharging system in targeted time slots generates a dual benefit: ecological, by reducing greenhouse gas emissions, and financial, by lowering the cost of energy supply. While the Group has been operating hydrogen-powered buses in La Roche-sur-Yon (France) since 2021, RATP is currently working on two hydrogen bus projects for Île-de-France Mobilités in Créteil and Bagneux. An innovation programme on battery efficiency and secondary uses is currently being studied. The Group currently shares its unique expertise with many local authorities in France and abroad, by proposing engineering services, advising them in their choice of the most suitable energy mix, and converting their bus networks.





François Warnier de Wailly, Director, Bus2025 programme, RATP Group

"With the energy transition, the choice of energy source - methane, hydrogen or electricity - becomes a decisive factor in developing a transport service offering. These choices have turned our bus depots into energy transformation and refuelling hubs. As a major industrial player in cities. we now have to work closely with energy suppliers, taking into account their operating conditions and constraints in order to meet the expectations of regional authorities. The Bus2025 programme is a perfect illustration of the new order: it has stimulated the electrical industry and led to the emergence of innovative solutions to ensure the successful transition of our industrial facilities. It is a success story, which means we can now move on to the next stage: energy optimisation."



## PARTNER AND ADVISOR TO LOCAL AUTHORITIES

The energy mix is crucial to the sustainability and competitiveness of transport services. Since 2019, RATP Dev has been assisting the Brest urban area (France) in electrifying its Bibus network fleet in phases by 2030, and in including biogas buses. For Angers Loire Métropole (France), the subsidiary has been leading the transition of the Irigo bus network fleet to natural gas and electricity. In order to convert the fleet. two natural gas plants had to be built, and the bus depot had to be adapted.

## TRANSFORMING BUS STATIONS

Bus stations are an essential link in the interconnection of cities' various transport modes. As such, they have to be accessible, welcoming and safe. The Group, which manages approximately 40 bus stations across the Île-de-France region, from Saint-Rémy-lès-Chevreuse to Garges-Sarcelles, has set up a dedicated structure bringing together the various areas of expertise involved, from design to the maintenance of past and present rolling stock, as well as safety, accessibility, passenger information, cleaning services, events and services.



#### "AUGMENTED" BUS DEPOTS IN CITY CENTRES

Paris bus depots are among the rare few industrial sites that are still located in the city centre, where they occupy a large surface area. They are undergoing a profound transformation in line with the energy transition. While they remain bus maintenance and parking sites, they have been redesigned and optimised to accommodate offices, housing units, services and facilities that are open to the neighbourhood. RATP Group's real estate expertise is what powers the transformation of its assets, by integrating them more intelligently into the city, as illustrated by the renovations of the Lagny, Belliard and Jourdan bus depots. The construction of housing units and public facilities as part of these programmes contributes to functional diversity, as it provides on-site accommodation for the staff who operate the transport networks, thereby improving service quality.





social housing units. 365 student housing units. one childcare centre, and a nursery were created during works to restructure the Jourdan-Corentin-Issoire bus depot in Paris

of available space in bus depots were leased out to major logistics companies



Valère Pelletier, **RATP Solutions Ville Chief Executive Officer** 

"In a dense city, space is a precious commodity that needs to be shared. We lease out unoccupied parking space during the daytime to logistics companies such as Amazon at four of our bus depots, to accommodate last-mile delivery activities. These companies have been chosen on the basis of rigorous specifications. applying operational, social (their staff must be employed on permanent contracts). and environmental criteria (delivery vehicles have to run on electricity of natural gas). These local microhubs help to reduce the impact of urban logistics in terms of pollution and traffic congestion. They are also a way for us to maintain the commercial speed of the bus network, by reducing the presence of heavy delivery vehicles in the capital."

## Our projects



Hydrogen-powered bus in La Roche-sur-Yon

# La Roche-sur-Yon, the

In La Roche-sur-Yon, a town with a strong commitment to the environment, the Impulsyon network fleet, which is operated by an RATP Dev subsidiary, now includes several hydrogen-powered buses. These vehicles are part of a totally new regional ecosystem in France, which produces 100% green, 100% local hydrogen. At the end of 2023, RATP Dev also opened the first training centre dedicated to hydrogen bus maintenance in La Roche-sur-Yon.

## Brest, a green multimodal network

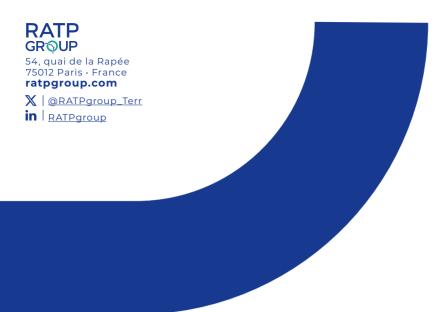
The Brest urban area is highly committed to sustainable mobility. Its Bibus network is becoming increasingly multimodal, with new transport modes being added to supplement bus services: trams. ropeways, maritime shuttles, electric bike fleets, and very soon (2026), a BRT system. RATP Dev is supporting the city in this project and advising it on the energy transition of its bus fleet, through the replacement of its equipment and the electrification of its depot.

## **Aiming for** self-sufficient energy at **bus depots**

By launching the SOLERE project, without being complacent.

## region's testing ground

the Group is studying, with the support of Île-de-France Mobilités, the feasibility of installing solar power plants on bus depots. Photovoltaic panels are currently being installed in five pilot depots in the Île-de-France region, either atop roofs or on car park shades. The installation of these solar panels should cover 12% to 13% of the bus depots' operating needs (excluding bus recharging), which will help them to be self-sufficient



Publication director: Jimmy Brun.

Editorial production supervisors: Emmanuel Bleuse, Clément Bocognani, Elodie Cloâtre, Agnès Desmarest-Coulon, and Anne Jacquinot.

Editor: Françoise Moinet.

English translation provided by the RATP Group Language Services Unit: Paul Ponessa, Claire Dehelly, and Debbie Lim.

Design and production: HAVAS Paris

Photo credits: Cover, Xavier Chibout/RATP. Page 2, Arié Botbol/Hans Lucas. Page 3, Marin Driguez/Agence VU/RATP. Page 4 (top), Arié Botbol/Hans Lucas. Page 4 (bottom), Xavier Chibout/ RATP. Page 5 (portrait), DR. Page 5 (bottom), Martial Ruaud/Andia.fr. Page 6 (portrait), Stéphane Dussauby/RATP. Page 8, DR. Page 9 (top), DR. Page 9 (bottom), Cyrus Cornut/RATP. P10 (portrait), DR. Page 11, Nikola Krtolica. Page 12 (centre), Xavier Chibout/RATP. Page 13 (portrait), DR. Page 13 (bottom), Cyrus Cornut/RATP. Page 14 (top), Hamdi Chref/RATP. Page 14 (bottom), Xavier Chibout/RATP. Page 15 (top), Hamdi Chref/RATP. Page 15 (portrait), Gilbert Lasne/RATP. Page 16 (top), Xavier Chibout/RATP. Page 16 (centre) C. Hocquart-Andia. Page 17 (bottom), Cyrus Cornut/RATP. Page 18 (top), Hamdi Chref/RATP. Page 18 (portrait), Vanessa Buhrig. Page 19 (portrait), A.A. Schipper. Page 19 (top), Arié Botbol/Hans Lucas. Page 20 (centre), Jérémy Tondu/RATP. Page 21 (top), Xavier Chibout/RATP. Page 22 (portrait), Gilbert Lasne/RATP. Page 23, Xavier Chibout. Page 24 (top), Éric Touzé/RATP. Page 24 (bottom), Hamdi Chref/RATP. Page 24 (portrait), Gilbert Lasne/RATP. Page 25, DR.

Printed in France by Groupe des Imprimeries Morault on extra white Splendorgel paper (FSC Mix) February 2025.



