



SUSTAINABLE DEVELOPMENT REPORT

2014-2015

November 2015

TABLE OF CONTENTS

4 FOREWORD

8 TACKLE CLIMATE CHANGE AND ADAPT THE CITY TO CLIMATE CHANGE

- 10 More sustainable development zones to improve the resilience of Paris
- 11 Public facilities that are built or renovated will comply with Paris's Climate and Energy Action Plan
- 12 Paris secures its place as a pioneer in tackling climate change
- 13 Improving housing energy efficiency is one of the term's priorities
- 14 The service sector progressively joins the fight against climate change
- 16 The City launches the Climate Change Adaptation Roadmap
- 16 Paris, key player in international initiatives

18 IMPROVING THE ENVIRONMENTAL QUALITY OF PARIS

- 19 Paris implements an atmospheric pollution action plan
- 20 Priority is given to non-motorised traffic
- 21 The city sets an example
- 22 Paris introduces new measures for reducing Parisians' exposure to noise pollution
- 23 Paris will be one of the first cities in France to have an Environmental Health Plan

26 PROMOTING BIODIVERSITY IN PARIS: GREEN AND BLUE CORRIDORS

- 28 The departments of the City of Paris will continue their work in order to obtain a better understanding of Parisian biodiversity
- 28 The City of Paris has chosen the Singapore index for evaluating its biodiversity policy
- 29 Paris launches the drafting of a new Biodiversity Plan
- 30 A new blueprint for the Parisian ecological network is taking shape: the Nature Paths
- 31 The greening of Paris continues
- 32 Installing nature on buildings and in public places
- 32 Parisians green the City
- 34 Urban agriculture expands throughout the Capital
- 36 The global, ecologically responsible and fair water management is fundamental for the Capital

38 CONTRIBUTING TO THE FULFILMENT OF OTHERS THROUGH CIVIC INVOLVEMENT

- 39 Upgraded Forums
- 40 Encourage resident participation in other ways
- 41 Users contribute to the creation of the Metropolis of Greater Paris

- 42 The City of Paris strives to involve residents and local businesses in development planning
- 43 Local authority support for associations

44 REINFORCING SOCIAL COHESION AND SOLIDARITY BETWEEN TERRITORIES AND BETWEEN GENERATIONS

- 45 Paris is rallying its forces to combat large-scale exclusion
- 47 The City is diversifying its aid policies for children and families
- 48 A programme to facilitate everyday life for disabled Parisians
- 50 Applying the Gerontology Plan
- 51 A new outreach organisation to facilitate access to rights
- 52 Housing supply is improving
- 53 Promoting social and occupational integration through the Social and Solidarity Economy (ESS)
- 54 Promoting gender equality, social and occupational integration within the Parisian civil service is one of the term's priorities
- 55 The local authority is dedicated to the most vulnerable neighbourhoods

- 56 PROMOTING RESPONSIBLE METHODS OF PRODUCTION AND CONSUMPTION AND SUSTAINING THE CIRCULAR ECONOMY
- 57 Paris is moving towards zero waste
- 58 Paris City Hall is maintaining its waste prevention initiatives
- 58 Reuse is being extended to new "waste"
- 59 Recycling networks are being developed in the city
- 61 Paris City Hall is developing a socially and ecologically-responsible public procurement scheme
- 62 Paris is developing a sustainable food system
- 64 Paris will propose a Charter of environmentally-responsible events
- 65 Paris is committed to the city's circular economy
- 66 CONCLUSION
- 68 ADAPT PARIS TO THE CHALLENGES OF THE 21ST CENTURY

Foreword

his latest Sustainable Development Report from the City of Paris is not simply a review of actions taken in 2014 and those in progress in 2015. It also reflects the incredible dynamic undertaken in the city and beyond so that, from now until 2020, Paris will adapt to the challenges of the 21st century on a grand scale. Private and public entities as well as individuals have answered the Paris Mayor's Office's call to launch a vast community involvement in preparation for the "Conference of the Parties" on climate issues organised by the United Nations (COP21) to be held this December.

Launched in April 2014, implementation of the priorities for this term of office has already shown encouraging results in the area of sustainable development. Implementing a participative innovation process in all areas, whether economic, behavioural or technological, has helped achieve these goals. Here are some notable achievements inspired by this process.

Adopting a sustainable strategy for the area's economic development **becomes crucial.** Cities must now find solutions that help us change from a disposable society to a sustainable society. Today, the City of Paris, up to its highest level, supports this ambition for the Greater Paris region. In collaboration with its partners, the City hopes to make the region a pioneer in converting its economy into a positive, sustainable model that creates jobs that cannot be outsourced. To achieve this, Paris launched the General Assembly on the Circular Economy of Greater Paris in March 2015. Its objective is to extend all of its initiatives and help new solutions to emerge in production, consumption and distribution methods for goods and services. Co-organised with several municipalities in the Paris region and 120 entities of all types, this process has resulted in a set of 65 actionable recommendations presented in a White Paper. Intended for public decision-makers in the Paris region as well as citizens and economic participants, this White Paper is the first step towards a circular economy for the Paris region.

At the same time, **the City is co-drafting an Adaptation Roadmap from its Climate and Energy Action Plan.** Paris is a robust city that nevertheless has weaknesses in climate change and resource scarcity: namely heat

waves, flooding, and availability of water resources. Based on scientific studies, experiments, experience gained by city departments in crisis management, and recommendations from Parisians, a new strategy to help Paris adapt is being implemented. The resulting adaptation road-map approved by the Council of Paris in September 2015 aims to protect Parisians and the city and preserve resources and services, all while improving Paris's quality of life, solidarity and attractiveness through innovation, experimenting and above all moving the city forward.

As a pioneer for 10 years in testing sustainable solutions, **Paris has become a key window into new uses and technologies.** The same city administration that made 2015 the year of the climate fully supports those who mobilise and inform all Parisians. Through the "Everyone for the Climate!" call for projects, the Mayor's Office gave financial support to associations' educational, cultural, sports and interactive projects. Meanwhile, the "Paris of the Future" event looks to present French and international expertise in innovation and energy transitions to the public and the 50,000 participants of the COP21. Nearly 100 partners will present their solutions alongside those from the City from 30 November 2015 to 13 December 2015 in front of City Hall.

Some of these innovations will be applied as part of the **1,000 Buildings Initiative (2016-2020).** It will continue the measures the City has implemented since 2007, such as "Co-owners' Associations: Aim for the Climate!" that ended in 2014. Its main objective is to help private coowners' associations undertake energy-saving renovations that are as wide-reaching as possible to help fight energy insecurity. Overall this initiative looks to accompany 1,000 energy-inefficient buildings in completing 300 energy-saving renovation projects.

Beyond innovation, **citizens' and civil society's implication** in climate change and sustainable development issues is a determining factor in achieving the ambitious goals for this new term of office. It helps everyone to understand the coming challenges better, discover existing initiatives and adopt responsible behaviour.





The challenge of renewing **participative democracy** and codevelopment is a success. Over 500,000 Parisians contributed to selecting sustainable investment projects through the participative budget launched in 2014. Furthermore, to benefit from city employees' ideas and experience, the Paris Mayor's Office organised a consultation between March and April 2015 **to make the administration more environmentally friendly**. The first implementation measures in the circular economy and professional travel are already underway.

As cities generate around 70% of the world's greenhouse gas emissions and as they have already implemented innovative climate solutions, they have an important role to play in rallying the world for the climate at the end of this year. As a member of the largest global networks of cities working to tackle climate change, **Paris is the voice of cities around the world in climate negotiations**.

The first step in 2015 consisted in working to **mobilize Europe's largest cities** that came together this past March. Representatives from 32 cities reached an agreement to define new goals in reducing greenhouse gases by 2030. They also studied measures to pool public procurement orders. Their goal is to encourage industry to invest in clean and sustainable technology in key sectors where carbon impact is the most important: vehicle purchases, construction, energy, etc.

Throughout the year, the City and its partners have acted to prepare the next crucial step. For the first time in over 20 years of negotiations, a new international climate agreement among countries can be reached at **COP21** in Paris, with the aim of keeping global warming under 2°C. Cities and local officials will be at the negotiating table alongside other stakeholders and intend to be leaders in climate solutions.









In accordance with the decree of 17 June 2011, this Report elaborates on the five aims of sustainable development:

- **1.** Fighting and preparing the city for climate change
- 2. Encouraging biodiversity in Paris: The Paths of Nature
- 3. Contribute to the happiness of all through citizen participation
- 4. Reinforce social cohesion and solidarity among regions and generations
- **5.** Promote responsible production and consumption methods and support a circular economy

An additional section will detail the City's actions in improving air quality. The aim of this sustainable development report is to shed light on the debates over budget guidelines for the 2016 preliminary budget.

Over the course of this text, readers will find icons highlighting initiatives that represent Paris's commitment to the climate, innovation, international relations, the circular economy, actors for a sustainable Paris, Metropolis of Greater Paris and administration.

Paris climate action



Paris in 2100 © Y. Gourvil & C. Leroux, Mairie de Paris, DEVE, AEU

TACKLE CLIMATE CHANGE AND ADAPT THE CITY TO CLIMATE CHANGE

he 2013 IPCC report confirms that climate change is essentially caused by greenhouse gas emissions from human activity. Cities are at the heart of the issue. They house over 50% of the world's population and attract a large number of activities, accounting for over 60% of global emissions. Since

2005, many cities have begun implementing policies to reduce their emissions of greenhouse gases and energy consumption, such as Paris who adopted its first Climate Action Plan in 2007.

The first Paris Climate and Energy Action Plan launched a "factor 4" process for the city.

Adopted in 2007 following wide-ranging consultation with all Parisians and updated in 2012, the <u>Paris</u> <u>Climate and Energy Action Plan</u> sets the following objectives for 2020:

- 25% reduction in the city's greenhouse gas emissions and 75% by 2050 ("factor 4"),
- 25% reduction in the city's energy consumption,
- 25% of the city's energy consumption coming from renewable and recoverable energy sources,
- these three objectives were set at 30% for Paris's administrative operations,
- adapt the city to climate change.

The Paris Climate and Energy Action Plan's main guidelines and action programme cover the city's development, housing, service sector, mobility, consumption, waste management and adapting to climate change.



Paris Climate and Energy Action Plan © Mairie de Paris

In December 2015, Paris-Le Bourget will host COP21

(the United Nations Conference on Climate Change), a key step in international negotiations to tackle climate change. As the host city, Paris has used the occasion to reinforce climate initiatives in many areas:

- **1.** By helping involve Parisian community:
- the "Everyone for the Climate!" call for projects to support initiatives from civil society,
- the "Paris of the Future" exhibition to present concrete climate solutions to the public,
- Hosting and organising scientific, cultural, and association events.
- **2.** By reinforcing the City of Paris's public policies:
- committing to sourcing 100% of city buildings' and lighting's electricity from renewable sources,
- adopting the adaptation roadmap that outlines operational strategy to adapt the city to the effects of climate change and the scarcity of resources,
- developing the "Paris Commerce Energie" platform and drafting a Tertiary Services Roadmap to accompany businesses in making environmentally friendly changes,
- committing to the "1,000 Buildings Initiative" to support energy-saving renovations in private homes and fight energy insecurity, etc..
- **3.** By developing its actions abroad:
- declaring its ambition and commitment with cities throughout the world to fight climate change (Summit with major European cities on 26 March, Summit of local elected officials to fight climate change on 4 December),
- creating the Cities and Municipalities' Green Fund to support international solidarity in financing initiatives in the most vulnerable regions.

The presentation of the City's initiatives below shows the pressing need to act on different levels in consultation with the area's stakeholders, while increasing international partnerships. To reach the Climate and Energy Action Plan's objectives, for over 10 years the City of Paris has pursued a policy of investing in city improvement projects to include ambitious sustainable development criteria. This approach seeks to prepare Paris for the challenges of the 21st century and to promote creating eco-neighbourhoods over the whole of the city when constructing and renovating buildings. Indeed, the nearly 3,000 municipal facilities in Paris, public spaces, especially lighting, as well as the 230,000 social housing units, represent a remarkable lever in saving energy and reducing greenhouse gases. Along the same lines, the City supports co-owners' associations in far-reaching thermal renovation projects. The tertiary sector is also moving to reduce its environmental impact. Through its experience and achievements, Paris actively participates in strengthening networks of committed cities throughout the world.

MORE SUSTAINABLE DEVELOPMENT ZONES TO IMPROVE THE RESILIENCE OF PARIS

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PARIS IS UPDATING ITS URBAN LOCAL PLAN TO RESPOND MORE EFFECTIVELY TO TOMORROW'S CHALLENGES

The work to update the Urban Local Plan will be presented to Paris's elected officials in 2016. Its objective will be to reinforce regulations that will further extend nature's presence in the city and, more generally, improve the quality of Paris's environment. These regulations fall into four categories: strengthening biodiversity, parking surfaces for new construction projects, urban logistics in line with the air pollution action plan, and waste management.



Green wall, Clichy Batignolles (17th). © G. Picard

PARIS CONTINUES TO DEVELOP ECO-NEIGHBOURHOODS AND WAS SELECTED IN THE "200 POSITIVE ENERGY REGIONS FOR GREEN GROWTH" CALL FOR PROJECTS

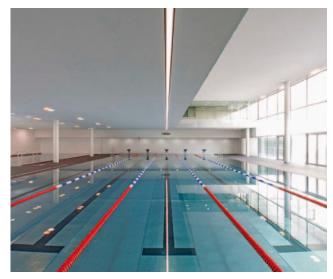
In 2014, the City of Paris was rewarded by this call for projects launched by the French government for its integrated approach that supervised improvement operations. The **Clichy-Batignolles sustainable** development zone (17th arrondissement) is an example of the city's use of innovative and positive practices in controlling energy use and creating green spaces. The energy needed for heating and providing hot water primarily comes from geothermal sources. Heat input from water from the Albian aguifer, located 650 m below the surface and at a temperature of 28°, will be complemented by the city's urban heating network and photovoltaic electricity production. For summer comfort, offices will be designed to use natural ventilation systems (free night-time cooling) and solar protections. Other urban projects also fit in to this approach: Paris's first Gare de Rungis econeighbourhood (13th arr.) and the coming Eco-neighbourhood Saint Vincent de Paul (14th arr.). In order to evaluate eco-neighbourhoods' answers to society's main challenges, the Paris Mayor's Office has recently launched an evaluation of three of Paris's eco-neighbourhoods (ZAC Claude Bernard (19th arr.), Secteur Fréquel-Fontarabie (20th arr.) and ZAC Boucicaut (15th arr.)). It will seek to support certified operations over time and will cover the areas of energy, water, waste management and digital technologies.

PARIS PARTICIPATES IN THE URBAN LEARNING PROJECT IN PLANNING SUSTAINABLE ENERGY POLICIES

Working with Europe's research ecosystem and partner cities has become a necessity in sharing experiences and finding new solutions. That's why, as part of the European Horizon 2020 programme, the City of Paris is participating in the Urban Learning project that looks to improve public authorities' ability to plan and implement policies and measures to promote sustainable energy. This project brings together Paris, Vienna, Berlin, Stockholm, Amsterdam / Zaanstad, Warsaw and Zagreb.

PUBLIC FACILITIES THAT ARE BUILT OR RENOVATED WILL COMPLY WITH PARIS'S CLIMATE AND ENERGY ACTION PLAN

The city of Paris has led an innovative pilot project at the Beaujon sports centre (8th arr.), in partnership with the Scientific and Technical Centre for Construction (CSTB), to establish what has become the "NF High Environmental Quality (HQE) sports / pool facilities" standard. All aspects of managing energy, water, and waste have been analysed to limit the environmental impact of these innovative facilities. For example, it includes stainless steel swimming pools filled with ozone-treated water.



Swimming pool Beaujon (8th). © P. Dhennequin

After three years of restructuring and extension works, the **Olivier de Serre school complex (15th arr.)** has become a model ecological building. It is the city's certified low-consumption (BBC) and HQE building. Completed in January 2015, it features many ecological innovations: solar panels, a green roof, greenery on the walls, a pond, greenhouse, educational gardens to help students discover gardening, etc.



School complex Olivier de Serres (15th). © Mairie de Paris, DPA

THE CITY CONTINUES ITS THERMAL RENOVATION PROGRAMME IN SCHOOLS

In accordance with the guidelines in the Climate and Energy Action Plan, which includes taking action in Paris's schools, the city is continuing its thermal renovation programme in schools. After a first Energy Performance Contract launched in 2012 for 100 schools resulting in over 33% energy savings, work on a second wave (140 schools) is planned to begin in summer 2016. This contact is issued as a global public procurement contract for a length of 15 years.



Nursery, 46 rue Piat (20th). © DFPE

PARIS SECURES ITS PLACE AS A PIONEER IN TACKLING CLIMATE CHANGE



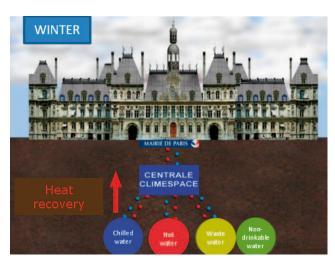
THE CITY WILL SUPPLY ITSELF WITH 100% GREEN ENERGY IN 2016

Under the commitments of the Climate and Energy Action Plan, the City of Paris will launch a public call for tender beginning 1st January 2016. This offer will also concern partners of the procurement group (the City of Paris Centre for Social Action and the "Paris Musées" public institution). In the meantime, a study is being carried out on potential sites for recovering energy from used, grey and non-drinking water. Very innovative projects to make use of these resources are already in progress.

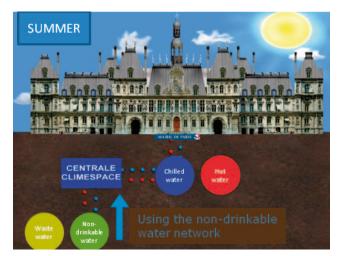
Experiments on recovering heat from used water for the **Wattignies school complex (12**th **arr.)** in 2011 used a heat exchanger installed in the sewer. This device helped cover 53% of the school's energy needs for the whole of the winter 2014-2015 period.



In April 2015, an innovative solution to recover calories from heating, cooling, used and non-drinking water networks was installed at **City Hall**. The energy recovered will cover 30% of City Hall's heating needs and 45% of its cooling needs. Furthermore, it will help save up to 250 tonnes of CO_2 each year. This project is the result of an exemplary partnership between Climespace, the Compagnie Parisienne de Chauffage Urbain, Eau de Paris and the City of Paris.



Experimentation at the City Hall (4th). © Climespace



Experimentation at the City Hall (4th). © Climespace

PUBLIC LIGHTING IS THE ADMINISTRATION'S SECOND LARGEST ENERGY EXPENDITURE

This includes lighted signage, lighting for public spaces and light installations. The energy performance contract implemented since 2011 has helped achieve 21% energy savings, equivalent to the annual consumption of Toulouse. The city is testing innovative LED-based public lighting solutions. Furthermore, intelligent applications are being developed, such as testing motion sensors for pedestrians and cyclists on certain Paris streets.



LED street light (Boulevard Voltaire, 4th). © Mairie de Paris

IMPROVING HOUSING ENERGY EFFICIENCY IS ONE OF THE TERM'S PRIORITIES

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Frequel (20th). © A.Gueguen, Mairie de Paris

THE CITY IS IMPLEMENTING MEASURES TO PROMOTE PRIVATE AND SOCIAL HOUSING

Social housing organisations are required to respect environmental specifications in which the City has included criteria related to the Climate and Energy Action Plan, limiting water consumption, and ensuring residents' health and comfort. Overall, nearly 24,000 new rented social housing units were financed from 2008 to 2014.

Achieving the objective in the Housing Roadmap of the Climate Action Plan of reducing energy consumption and greenhouse gas emissions by 20% for social housing will require renovating existing housing at a rate of 4,500 homes per year. Over the 2008-2014 period, over 28,000 social homes benefited from financing as part of renovation initiatives in the Climate and Energy Action Plan. These renovations helped reduce consumption by over 260 GWhep / year, equal to the energy consumption of over 15,000 homes.



Energy-saving renovations in public housing HSF Soleil. © S. Bouchereau

THE CITY ACCOMPANIES THERMAL CHANGES IN PRIVATE HOUSING

Since 2009, the City has helped include energy-related initiatives in actions to fight derelict private housing. Exterior thermal insulation renovation works were carried out as part of reclassifying private residential buildings in the 17^{th} (Épinettes 2) and the 18^{th} (Belliard Doudeauville) arrondissements.

The first **planned thermal improvement project in a Parisian building**, the OPATB in the 13th arrondissement, was carried out between 2008 and 2014. It concerned 327 private residential buildings built between 1940 and 1981. After 5 years of operation, 11,846 homes received a free thermal diagnostic. 5,347 of them were accompanied in applying for energy-saving renovations from the electricity company. Additionally, 3,522 homes carried out thermal renovation works for overall energy savings of 16 GWhep/year, equal to the consumption of nearly 1,050 average homes in OPATB 13.

The energy savings and sustainable development housing improvement project planned for 2012 to 2016 for old private residential buildings in the République district includes a comprehensive environmental dimension (greening, water management, renewable energy, accessibility, etc.). Co-owners' associations were selected through a call for applications. 49 buildings received a comprehensive evaluation and 26 were monitored by a private housing manager in their renovation works. The evaluations recommend two or three renovation scenarios defined jointly with residents, the large majority of which include isolating opaque walls and treating woodwork and ventilation.

The OPATB 19 helps support co-owners' associations in the arrondissement in energy-saving and environmentally-friendly renovation projects. A first call for applications was launched at the end of 2014. 80 co-owners' associations were considered, of which 19 are in the project's conception phase and 10 under construction as of 30 September 2015. This operation has learned from the OPATB 13 and OPAH 2D2E.



"ÉNERGIE PARTAGÉE"

Following the lead of the Paris Climate Agency's private partners, wide-reaching initiatives are appearing all over France. "Energie partagée" is a case in point. This national movement seeks to accompany and finance renewable energy and energy efficiency projects initiated and managed by local citizens (photovoltaic roofs, wind turbine parks, micro-hydraulic power plants, wood stoves, etc.).

Agence Parisienne du Climat

THE PARIS CLIMATE AGENCY (APC) ENTERS ITS FIFTH YEAR

With the support of its founders, including the City of Paris and the Île-de-France Region, institutional partners and its 90 members, the APC works to translate the area's Climate Action Plan's main issues into operational objectives and concrete actions. It has three primary missions.

INFORMING AND ADVISING THE PUBLIC

This association independently informs and advises Parisians and other area stakeholders free-of-charge. The association helps users find professionals, apply for subsidies, learn about relevant heating and insulation systems, and use energy-saving certificates.



Users (individuals and housing operators) can get advice from a dedicated service and CoachCopro, a website dedicated

to energy-saving renovations. Thanks to this programme, around 22,000 homes have received subsidies to perform an energy audit as part of the "Co-owners' Associations: Aim for the Climate!" initiative that ended in 2014. The APC launched a new energy renovations platform for co-owners' associations. To be coordinated with the coming launch of the 1,000 Buildings Initiative, the platform's primary objective is to promote co-owner's associations' widespread adoption of energy-saving renovations.

MOBILISING THE CITY

Alongside organising events to mobilise the public, the APC is hosting **ParIS Green** with Paris&Co. This platform is aimed at business, academic and institutional stakeholders who want to see or promote Paris as a smart and sustainable urban area.

The Paris Climate Agency launched its 2015 Climate and Energy Action Kit (available online) in March 2015 to help Parisians understand and respond more easily to the challenges posed by climate change. The APC also participates in partners' initiatives, such as the Our-Life21 project that tries to imagine what our planet will be like in 2050.

ACCOMPANYING THE ENERGY TRANSITION

As part of the national sustainable building plan, the APC has devised a comprehensive training programme aimed at co-owners' committees, building managers and other renovation project participants. Its training offers also apply to other actors, such as building supervisors and others helping to fight energy insecurity. From 2011 to 2014, the APC has trained over 5,000 people.

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THE SERVICE SECTOR PROGRESSIVELY JOINS THE FIGHT AGAINST CLIMATE CHANGE

To promote initiatives already being implemented by Paris businesses and institutions and develop a partnership dynamic to fight climate change, the City of Paris created the **Paris Climate Action Charter**. In signing the charter, the company commits itself to including Paris's Climate and Energy Plan objectives in its business by limiting energy consumption and reducing greenhouse gas emissions. 31 businesses have signed the charter and committed to avoid emitting 500,000 tonnes of CO2 per year within Paris's borders. In 2015, the City of Paris launched Paris Commerce Energie, a website that gives specific advice to neighbourhood businesses to better limit their energy consumption and reduce their bills.

PARIS ACTIVELY SUPPORTS INNOVATIVE BUSINESSES IN ECO-ACTIVITIES AND IN THE GREEN ECONOMY

Paris supports specialised business networks such as Durapole, the newly created Water Environment and Soils Cluster sponsored by the Seine Amont community of cities, and the sustainable city competitiveness cluster Advancity. The City also sponsors the Paris Region Innovation Nord Express business cluster (18th arr.), a smart-building of nearly 10,000 m² of surface space that hosts around thirty of this sector's start-ups. These are accompanied by Paris&Co (Cleantech business incubator) or can be hosted by other Paris incubators such as Agoranov, ParisTech Entrepeneurs, Pépinière 27, etc. In this case, they can receive financial support from the City and the Public Investment bank via the Paris Innovation Seed Fund (PIA). More generally, the City can help SMEs through financing tools such as interest-free loans (Réseau Entreprendre, Scientipole Initiative) or loan guarantees through the Paris Finance Plus scheme.



Business incubator Paris Innovation Boucicaut (15th). © H. Garat

THE PARIS ADMINISTRATION IS INVOLVED IN <u>"SMARTCITY"</u> <u>DEVELOPMENT</u>

Its efforts in this area revolve around three main initiatives: The first initiative is "open source" that pools departments' human and financial resources and reduces the information and communication technologies' environmental footprint. The second concerns deploying "unified communication" that allows the user to have access to the same telephone equipment (fixed line, mobile, smartphone or tablet) for video and web-conferencing. Lastly, the third is part of "Green IT". This test, carried out at the end of 2014, consists in deploying dedicated energy-management strategies on 1,000 workstations. Extending these principles to the whole administration is beginning and also seeks to optimise server resources.

In 2014, the City of Paris signed up to Europe's sustainable urban development movement by applying to the Horizon 2020 "Smart Cities & Communities 1" call for projects. Paris has offered, alongside Berlin and Bologna and with the support of research laboratories and businesses, to accompany the European Commission in its wish to experiment sustainable neighbourhoods with integrated energy management systems. Installing renewable energy production systems, supporting electric mobility and insulating residential buildings (5th and 13th arr.) are this application's main points.



Paris & Co is Paris's innovation and economic development agency. Supported by the City of Paris and the Île-de-France region, its mission revolves around four domains.

- 1. Experimenting: 200 experimentation projects were accompanied via calls for projects or alone in order to validate new solutions from businesses.
- Incubators: 200 start-ups in the seeding and start-up phases are housed and supported each year.
- **3.** Open innovation club: start-ups are put into contact with large companies.
- **4.** Invest in Paris: foreign companies looking to establish themselves in Paris are prospected and accompanied.

In the area of sustainable development, Paris&Co and the City of Paris hosted the "Innovative greening", "Improving urban metabolism", "Sustainable urban logistics" and "Buildings' energy efficiency" calls for projects. The goal of these calls for projects is to allow businesses to test their ideas in real situations in Paris's public domain.

THE CITY LAUNCHES THE <u>CLIMATE CHANGE</u> ADAPTATION ROADMAP

Faced with the expected consequences of climate change, Paris is a robust city, but one that also shows certain points that need to be monitored carefully, particularly heat waves, flooding and water resources. Since adopting the Climate and Energy Action Plan in 2007, Paris has been committed to pro-active policies in reducing its carbon footprint while progressively preparing itself to adapt to climate change.

When the Climate and Energy Action Plan was updated in 2012, the Council of Paris wanted to translate its approaches into operational roadmaps to define and accelerate implementing climate and energy policy. Several roadmaps have already been drafted; the actions in the Administration Roadmap and the Housing Roadmap are already being put in place, and the Citizen's booklet serves as a tool to raise awareness among the public at large. Paris's first Adaptation Roadmap complements the Climate and Energy Action Plan by defining a detailed strategy and objectives dedicated to preparing our city for the effects of climate change and the scarcity of resources. It is divided into 4 main themes.

- Protecting Parisians against extreme climate events.
- Guaranteeing Paris's water, food and energy provisions.
- Living with climate change in Paris: the facilities of tomorrow.
- Accompanying new ways of life and reinforcing solidarity.

PARIS IS DIVERSIFYING USES OF NON-DRINKING WATER THAT CAN HELP THE CITY ADAPT

Paris is one of the few cities in the world with networks of both drinking and non-drinking water. Non-drinking water comes from the Seine and the Ourcq Canal. It is used almost exclusively for three things: watering green spaces, lakes and woods, washing pavements and helping carry effluents into the sewers. In 2014, sizeable investments of $\xi_{5.9}$ million were made in restoring the network, compared to $\xi_{2.2}$ million in 2013. Modernising the network is included in the new drinking water network and use plan for 2015-2020.

The non-drinking water network could be part of Paris's preparation strategy. Experiments are being carried out by Eau de Paris to use the non-drinking water network as an energy source in thermal exchanges with the heating and cooling networks, or by the City on its potential for cooling public spaces with nondrinking water during heat waves.

PARIS, KEY PLAYER IN INTERNATIONAL INITIATIVES

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Cities and municipalities have an essential role to play in the global fight against climate change. In 2014 and 2015, on the eve of hosting COP21, the City of Paris, with 10 years of experience in fighting climate change, has reasserted its role as leader and spokesman for cities committed to this process.

THE CITY PARTICIPATES IN ESSENTIAL INTERNATIONAL NETWORKS

In fighting climate change, the role of municipal networks is vital in contributing to strategies defined at an international level. These networks are also incredible platforms for discussing local social and environmental policies and best practices. Paris is a signatory of the Covenant of Mayors (2009), the Mexico City Pact (2010), signed by over 70 member cities of the UCLG, and the Compact of Mayors (2015).

Among the major global networks that Paris has partnered with are <u>C40</u>, <u>ICLEI</u>, <u>UCLG</u>, <u>Energy Cities</u>, <u>the</u> <u>Covenant of Mayors</u>, <u>the Compact of Mayors</u>, <u>CCR</u>, <u>CDP</u> and <u>NAZCA</u>.



The Compact of Mayors

PARIS IS COMMITTED TO SEVERAL INTERNATIONAL CLIMATE INITIATIVES

For the year of the United Nations Climate Conference in Paris-Le Bourget, the City is dedicated to promoting municipalities' actions and diplomacy that help fight climate change every day.

It is the world's cities and regions who will oversee implementing commitments made by countries at COP21 and will deploy necessary measures on the field. Since 2014, the City of Paris has actively participated in all international climate summits and initiated several international processes.

On 26 March 2015, the Mayor of Paris invited representatives from major European cities to a meeting in Paris. During this meeting, the cities reaffirmed their commitment to fighting climate change. The 30 participating cities committed to reduce their greenhouse gas emissions by 40% by 2030 and prepared **to pool cities' public procurement contracts** to encourage industry to invest in clean and sustainable technologies that respect the environment.



Meeting of mayors of major European cities © H. Garat

In April 2015 the Council of Paris also decided unanimously to create a Cities' and Municipalities' Green Fund. This international solidarity scheme's mission will be to help the most vulnerable regions finance projects to adapt to or ease the consequences of climate change. This initiative is also an important marker for the success of international negotiations at the COP21 as it shows cities' concrete commitment and contributes to a positive dynamic on one of the most delicate topics of negotiation between the parties.

PARIS HOSTS THE CLIMATE SUMMIT FOR ELECTED LOCAL OFFICIALS

At the same time as intergovernmental discussions at COP21, Paris will organise a climate summit for mayors and local elected officials to give voice to cities and regions from around the world and offer them a unique platform during negotiations. The summit will be held on 4 December at City Hall and will be copresided by the Mayor of Paris and the Special Envoy of the United Nations General Secretary.

With the support of networks of committed cities and municipalities, over 1,000 participants from around the world will arrive at City Hall. Through discussion and interaction, the summit will help share and build cities' concrete local climate solutions. High-level conferences will be led by networks at prestigious locations in the heart of Paris. At the end of debates, the Mayor of Paris will present local governments' shared declaration on climate, which will be sent to participating countries at the United Nations Framework Convention on Climate Change (UNFCCC) and the COP21 Presidency to help fuel negotiations.

Paris climate action

As part of COP21 events, the City presents the "Paris of the Future" exhibition that invites visitors to discover innovative and concrete climate solutions: smart electric mobility prototypes, means of producing renewable energy and new recycling methods. Demonstrations of these solutions to fight global warming and adapt to climate change will be held in three places at three different times along the Seine's south bank, the La Villette basin and on Avenue Winston Churchill.

City Hall square will host these new technologies through the COP21 debates in December to give them international visibility.

IN 2015, PARIS WAS THE FIRST FRENCH CITY TO JOIN THE "100 RESILIENT CITIES" SCHEME

This scheme was launched in 2013 with the support of the Rockefeller Foundation. It looks to support 100 cities throughout the world which are ready to increase their resilience to the social, economic and physical challenges that they face and better prepare and manage their response to the increasing tensions and acute crises presented by an increasingly urbanised world.

The different public policies undertaken by the City already help to improve the city's resilience, whether through the Climate and Energy Action Plan, the strategy to adapt to climate change, the fight against pollution, the priority given to building housing, the term's major initiatives in fighting social exclusion, citizens' active participation in city government or preventing and handling crises.

The City of Paris's participation in the scheme will help draft and implement a comprehensive resilience strategy, receive financial and technical support, and access an international network of cities to share experience, knowledge and practices to improve its urban resilience.





Bercy garden, Paris (12th). © J.-B. Gurliat

IMPROVING THE ENVIRONMENTAL QUALITY OF PARIS

arisians' health and well-being is at the heart of the City's priorities. The capital, one of Europe's densest cities, welcomes more than 30 million tourists each year and counts over 2.3 million residents and 1.8 million salaried jobs. The city's economic prosperity and attractiveness brings inconveniences, the first of which remains road traffic. The road is most used means of transport.

Automobile traffic in Paris has been reduced by 25% in the last 10 years. The variety of improvements undertaken has contributed to this: building civilised spaces, implementing "30 km/h" and shared traffic zones, renovating the banks of the Seine, renovating parking spaces, developing the tramway, building protected bus lanes and creating neighbourhood bus lines, extending self-service bicycle and car rentals, supporting electric vehicle purchases (taxis, electric bicycles and motors, charging spaces), etc.



30km/h speed limit Zone, rue Rambuteau (4th). © C. Belin, DVD

However, these initiatives to improve air quality and reduce noise pollution must be reinforced. This will happen by redefining mobility to help react more quickly to peaks in pollution and encourage nonmotorised means of transport, public transport and electric mobility. The initiatives presented in this chapter also detail the benefits of better sharing public spaces and taking into account the environmental impact of goods transport.

Other sources of pollution and noise require special attention from authorities. A Parisian environmental health plan that defines priorities and actions on these issues is expected to be approved at the end of the year.

PARIS IMPLEMENTS AN ATMOSPHERIC POLLUTION ACTION PLAN

Although fighting air pollution has achieved great success against certain pollutants (sulphur dioxide, benzene, lead, etc.), recent studies have shown that levels of fine particles and nitrogen dioxide represent a major health problem. Road traffic accounts for half of all nitrogen oxide emissions and a quarter of all particles in the Île-de-France region. 66% of NO2, 58% of PM2.5 and 56% of PM10 come from cars.

Fighting air pollution is a major public health issue and one of the City's priorities. The plan to fight air pollution from road traffic, approved by the City of Paris in 2015, permits **measures such as banning the most polluting vehicles**, especially diesel-powered vehicles, by 2020. Heavy goods vehicles, coaches and buses registered before 1st October 2001 are banned from Paris between 8am and 8pm, including weekends, since 1st September 2015.

Other immediate measures encourage and accompany individuals in giving up their car, offer discounts for self-service car rentals, exempt payment for self-service bicycle rentals, and provide financial assistance in purchasing a bicycle. Employees can receive financial assistance in purchasing a clean vehicle.

The supplementary measures to encourage cleaner transport extend free surface parking and continue to develop a public network of charging stations at attractive rates.

MEASURES ARE BEING IMPLEMENTED FOR POLLUTION PEAKS

Paris has recently encountered peaks of heavy pollution in December 2013, March 2014 and March 2015. To reduce particle pollution, the Paris Prefect implemented alternating traffic days in Paris and 22 neighbouring cities. Other emergency measures can be implemented, such as banning heavy goods vehicles from the Paris region and requiring certain industries and farms to use less polluting production methods.

For its part, the City of Paris implemented free residential parking, free self-service bicycle and car rentals, information services for at-risk populations and strict limitations on motorised journeys. The Region implemented free public transport.

PRIORITY IS GIVEN TO NON-MOTORISED TRAFFIC

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THE CITY IS INSTALLING FACILITIES TO SHARE PUBLIC SPACES BETTER

Changing the city's landscape is a prerequisite to giving more space to non-motorised means of transport. The many improvements made to public spaces encourage inter-modal transport and the transit of pedestrians, cyclists and public transport. Meanwhile, new measures that expand the 30km/h speed limit reduce the risk of accidents and noise pollution.

At the end of 2014, 37% of Paris streets, especially near schools, were limited to 30km/h. The goal is to extend this to all streets, leaving only the major thoroughfares at 50km/h. Additionally, new pedestrian pathways are being built throughout Paris.



Bus and bicycle lanes, Boulevard Montparnasse (14th) © Mairie de Paris, DVD

Paris is implementing a specific plan to encourage cycling. The goals of the 2015 Bicycle Action Plan are characterised by a true change in scale regarding new improvements being made by the city. City administration wants cycle journeys to triple by 2020, raising its share of all journeys from 5% to 15%. All the improvements recommended in the Bicycle Action Plan will help double the length of Paris's cycle paths from 700 km today to 1,400 km by 2020.

One of the plan's main measures: the "Bicycle Express Network" will be opened in 2016 with 80 km of cycle tracks, including one from the Bois de Boulogne to the Bois de Vincennes. Other initiatives that will be launched between now and 2016 are the inauguration of the "EuroVelo Route 3" to encourage cycle tourism and creating bicycle garages in Paris to allow secure parking for cyclists. The city is also maintaining its efforts to create bicycle parking spaces. 10,000 new parking places will be created by 2020. Additionally, Vélib' achieved a new record in 2014 with over 286,000 subscribers and the P'tit Vélib' service saw great success in summer 2014 and summer 2015.

The city continues its efforts to improve public transport with its partners, extending the tramway and creating a "Rapid Transit Bus". The characteristics of these buses are as follows: frequent services, longer operating hours, dedicated lanes over part or all of the route, a ramp to enable handicapped access and ticket sales in stations. Finally, the City is actively helping to finance major infrastructure projects in the Île-de-France region such as extensions to metro lines 14 and 11.

2,000 passenger shelters are being installed throughout 2015. They offer new features, a better service for users and reduce energy use by 30%. 100 shelters will have a photovoltaic roof and 50 will have a green roof.



New bus shelter Bastille (12th) © B. Pedretti, DVD

Installing new electric charging stations is a crucial issue for the term. In 2014-2015, the Autolib' service installed 250 additional charging stations for individual vehicles. Users can charge their vehicles at these stations. By the end of 2015, 60 new normal and fast charging stations will have been installed, mostly in delivery zones.

By the end of 2015, the City will authorise private operators to manage 226 surface parking stations for self-service rentals of low-polluting vehicles (individual cars and light utility vehicles). This service will be a first for a city the size of Paris.



Electric car and electric terminal. © Mairie de Paris, DVD

PROFESSIONALS ARE MOBILISED FOR THE SUSTAINABLE URBAN LOGISTICS CHARTER.

Goods transport represents 20% of road traffic and 38% of fine particle emissions. At the city's initiative, 80 participants signed the new Sustainable Urban Logistics Charter in 2013. There are now 90 participants. One of this charter's main objectives is to make **50% of last-mile deliveries diesel-free by 2017**. To achieve this, the charter's signatories (institutions, infrastructure operators, transporters, etc.) have agreed to look for alternatives to diesel, carry out tests, renew vehicle fleets, and review route organisation and logistics centres' location.

The latest news from the charter includes six new natural gas distribution stations for vehicles in Paris and a survey of 1,500 of Paris's shopkeepers and craftsmen on their utility vehicle use. Finally, a self-service **light utility vehicle programme** managed by Autolib' is being created.

In 2015, the City launched a consultation of logistics operators to operate urban distribution centres: les Halles-Montorgueil / Concorde. Today, 15 urban logistics centres are located through Paris. Around 100 lots should be given a logistics location perimeter to preserve existing logistics sites and encourage logistics spaces when changing lots or undertaking urban projects.



A NEW CALL FOR TESTS WILL HELP INNOVATE IN TRANSPORTING GOODS

In 2015, the City and Paris&Co launched a call for tests in sustainable urban logistics to help discover solutions that can be reproduced to help improve goods transport's environmental footprint. Themes such as optimising routes or managing and pooling stocks of provisions are major focuses.

THE CITY SETS AN EXAMPLE





THE PARIS ADMINISTRATION'S TRAVEL PLAN LOOKS TO CUT CITY EMPLOYEES' JOURNEYS' GREENHOUSE GAS EMISSIONS BY 40% BY 2020

This Plan, in application since 2011, revolves around 12 actions. City employees' journeys for professional activities as well as commuting to and from work and deliveries made for the City are included. The City and its employees are testing new uses. Between 2014 and 2015, bicycle parking areas have been created as well as scanning letters for distribution and deploying shared electric vehicles in the "car sharing" pool.

An ambitious programme to reduce diesel vehicle use and replace it with cleaner vehicles is ongoing. By the end of 2015, the fleet will no longer have saloons or hatchbacks that use diesel, and 2/3 of utility vehicles or heavy goods vehicles will no longer use diesel fuel. In July 2014, results indicate respectively a "non-die sel" rate of 73% for the first group of vehicles and 53% for the latter. For Propreté de Paris, 85 vehicles or materials (refuse collection or street cleaning vehicles) in its fleet will be replaced between 2014 and 2016. However, the manufacturers' current offer for heavy goods vehicles does not meet all of our needs.



Shared electric vehicles for city employees © Mairie de Paris - DILT

THE CITY IS REDUCING THE IMPACT OF REFUSE COLLECTION AND STREET CLEANING

Between 2009 and 2014, the City of Paris's actions have helped reduce the environmental costs of its refuse collection and street cleaning fleets by 28%. To achieve this goal, departments monitor and test technological innovations in new materials.

PARIS INTRODUCES NEW MEASURES FOR REDUCING PARISIANS' EXPOSURE TO NOISE POLLUTION

Noise is a real challenge for public health and quality of life. It is the number one nuisance that residents complain about. According to the 2015 mappings of road noise, 11% of residents are potentially exposed to noise levels exceeding the regulatory limit value of 68 dB. The health effects caused by noise pollution are, in order of increasing seriousness: discomfort, sleep disturbances, cognitive disorders, physiological stress, and heart problems.

Since noise pollution comes mainly from road infrastructures, **a new Environmental Noise Prevention Plan for the City of Paris** (PPBE) was adopted for the 2015-2020 period. It contains 39 actions, grouped into three themes, which are aimed at mobilising the City in favour of mobility that is calmer and more sustainable, that preserves air quality, the improvement of housing in the context of the Energy Climate Plan.

Le PPBE includes maps of road noise that can be viewed on the Paris.fr website. In 2016 many of the measures detailed in the Plan will be launched, including a communication campaign for raising awareness among drivers, experimentation with noise-reducing surfaces in Paris proper, the first perception investigations conducted with Bruitparif, and the strengthening of traffic controls.

13% OF THE PARIS RING-ROAD IS ALREADY EQUIPPED WITH NOISE-ABSORBING MATERIAL

The Paris City Authority is committed to a policy of improving the quality of life for the 100,000 residents that live near the ring-road. To meet this objective, it has reduced the speed limit to 70 km/h and installed noise-reducing surfaces. The combination of the various measures has decreased noise levels by seven decibels, which is the perceived equivalent of reducing road traffic by one fifth. Since 2014, this initiative has been extended to segments of the ring-road where a large number of homes are concentrated. By the end of 2014, 13% of the ring-road had already been equipped with this noise-reducing surfacing. By the end of 2016, it will cover 30% of the ring-road driving surface.



"Noise-reducing" initiatives are increasing in the waste management sector. Paris is investing in the purchase of electric air blowers which reduce noise levels by 4 to 6 decibels compared to thermal air blowers, while also improving air quality. Since 2011, the City of Paris has also been renewing part of its fleet of thermal vacuum pavement sweepers with electrically powered units.



Automated vacuum waste collection systems installed in the <u>Clichy-Batignolles eco-district</u> (17th). Since January 2014, this collection system transports waste using an underground vacuum system. Eventually, 18 residential buildings will be connected to this network. The waste is transferred to a terminal where it is either incinerated or recycled.



Pneumatic collection of waste (17th). © E. Chaix



SOUND CITY, AN APPLICATION PROVIDING PERSONALISED NOISE EXPOSURE INFORMATION

This application, called SoundCity, was developed by the French National Institute for Research in Computer Science and Control (INRIA), with support from the City of Paris. It allows the user to obtain information on his or her exposure to noise on different time scales (hour, day and month), with regard to health recommendations. The data from voluntary users will be collected anonymously and used to establish a precise map of noise pollution.

PARIS WILL BE ONE OF THE FIRST CITIES IN FRANCE TO HAVE AN ENVIRONMENTAL HEALTH PLAN

Achieving a healthy society requires working together in several fields, whether it be urban planning, transport, housing, or social cohesion. It also requires developing solutions with local stakeholders and residents. The aim of the Parisian Environmental Health Plan (PPSE) is to focus on the essential levers of action and to reduce health inequalities. This is in line with efforts in Paris towards transparency and reinforcing public access to information in this area.

The PPSE cites 8 priorities: outdoor air quality, indoor environment, the fight against noise pollution, asbestos, lead, soil pollution, extreme climatic phenomena and chemical substances. The following are examples of the many areas of work presented in the plan: better incorporating health issues in urban planning projects, providing means of intervention in areas where weaknesses have been identified in terms of environmental health, raising awareness on environmental health, links between environmental health and sustainable food, strengthening capacities for local observation of environmental health in Paris and creating a centre dedicated to this purpose. The plan will also incorporate issues raised by links between lifestyles, environmental health and the rise in noncommunicable diseases.

FOCUS THE LABORATORIES OF THE CITY OF PARIS

The City of Paris has long led recognized efforts in the area of environmental health and hygiene, through 3 organisations dedicated to these areas: the City of Paris Hygiene Laboratory (LHVP), the Laboratory for the Study of Inhaled Particles (LEPI) and the Municipal Health and Hygiene Service (SMASH).

These organisations provide services to the departments of the City of Paris and to public and private sector clients in the areas of physicochemical pollution and microbiology, asbestos, mineral fibres, fine particles and disinfection, rat and pest control.



LEPI biochimie. © Mairie de Paris, DASES

The following are a few examples of priority health and environmental issues in which the City of Paris is taking action.

INDOOR AIR QUALITY IN CHILDCARE FACILITIES IS BEING CLOSELY MONITORED

Since the spring of 2014, early childhood centres have been the focus of a **campaign that systematically monitors the indoor air quality** of these facilities. The presence of formaldehyde, benzene and carbonic gas is measured in each establishment in order to evaluate the confinement of the rooms. In 2015, twothirds of the 400 establishments were instrumented. The first known results showed that the primary risk of exposure was the insufficient renewal of indoor air. All the solutions for improving the renewal of air in childcare centres will be implemented without awaiting the conclusion of the campaign. Complete mapping of these establishments will be available in the summer of 2016.

PARIS REDUCES PARISIANS' EXPOSURE TO ELECTROMAGNETIC WAVES

The last Parisian Mobile Telephone Charter was signed on 13 December 2012 with the 4 mobile telephone operators. The charter is aimed at reducing exposure to the lowest possible level, while still maintaining the quality of the provided service. After negotiating with the operators, the City of Paris obtained a maximum level of exposure to the electromagnetic fields created by mobile phones of 5V/m for transmitters of 2G, 3G and of 7V/m transmitters of 2G, 3G and 4G. **These levels are far below the national exposure limit values** (between 40 and 61V/m).

CITY SERVICES DEVELOP NEW TOOLS FOR POLLUTED SOIL

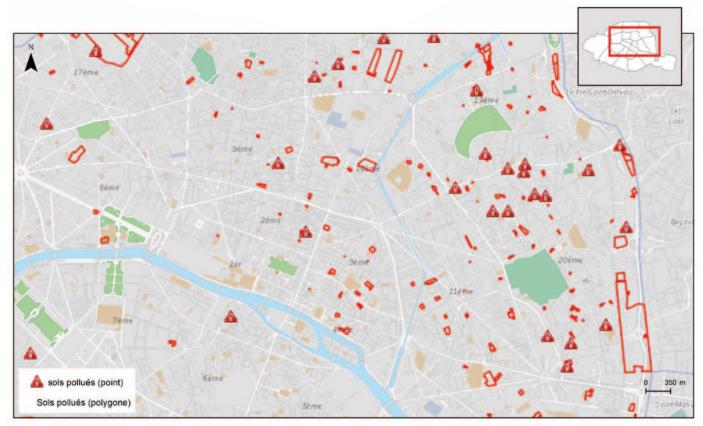
Possessing knowledge of the territory's soil and parcels of land has become a vital component in using and developing urban sites. A collaborative georeferenced database called "GéoSol" was created in 2013 by the City of Paris. The aim of this database is to ensure that a record is saved of the many actions carried out by the various services of the City (historical studies, diagnoses, decontamination works, operating and monitoring measures, etc.), and provide convenient access to that information and the use of a mapping tool for stakeholders involved in developing territories.

THE CITY TAKES ACTION FOR THE WORK HEALTH AND SAFETY OF ITS EMPLOYEES

The measures on occupational risks are from the "health-safety" framework agreement from 2012, which was aimed at better preventing occupational risks facing City employees. The municipal services for sanitation continued their efforts towards creating an inventory of activities that are likely to expose employees to asbestos dust. The measures implemented in 2014 on the operations of progression through the sewer systems indicated a number of fibres per litre that was below health limits. In addition to prevention work for the sewer workers, the companies working in the sewers have committed to the certification processes that are required for the task of removing asbestos. Furthermore, the presence of asbestos on roads has led to the generalized detection of this fibre before destroying overlays.



Hazmat suit for asbestos removal. © Mairie de Paris, DVD



Map of soil pollution studies in Paris. © J.-P. Viguié



Embankment Charles Renouvier (20th). © Mairie de Paris - DEVE/AEU

PROMOTING BIODIVERSITY IN PARIS: GREEN AND BLUE CORRIDORS

he presence of nature in the city contributes to improving the living environment and health of city dwellers, as well as reducing urban heat islands and pollution. This essential urban biodiversity provides city dwellers with many services through its aesthetic and social amenities: it contributes to the attractiveness of the city and its tourism value, serves an educational purpose for children and adults, reminds us of the seasons and rhythms of life, and provides cool areas and a sense of well-being. It is included among the City of Paris' strategic issues, as defined by the municipal team, in the form of ambitious objectives for creating green spaces.

At both the international and local level, strategies for fighting against the erosion of biodiversity have been set as priority objectives for reducing the destruction of natural habitats, the places where animal species live, and creating or restoring ecological continuity corridors through new forms of green spaces: by being able to move freely, populations of wild plants and animals can better withstand pollution, climate change and the pressure of human activities. These networks of ecological corridors are either terrestrial (green networks) or aquatic (blue networks). They connect reservoirs of biodiversity where animal species can find refuge, feed and reproduce. The green and blue corridors will be developed in Paris in 2016.

This initiative of creating green and blue corridors in Paris led to an environmental analysis of the territory of Paris being conducted over the past two years. This provided knowledge of habitat diversity, drew attention to challenge areas and provided a better understanding of how the ecosystems function.

16% of the surface of Paris and the two woods has thus been qualified as "functional urban reservoirs of biodiversity" — the main areas in Paris that are sources of biodiversity. In parallel with this continuing work of environmental qualification and identification of the corridors, a study on the presence of target species in the reservoirs of biodiversity is currently underway. Although the species that make up the spontaneous biodiversity of Paris are still numerous, their populations are often extremely reduced, some are declining, others are disappearing or are having difficulty surviving in restricted spaces. Pressures weighing on this fragile biodiversity include the fragmentation of spaces, the installation of artificial ground and the degradation of the soil, the reduction of open spaces, pressures from use, and the loss of the most suitable environments. These pressures provide ample motivation for continuing to add green spaces to the territory of Paris.

The Mayor of Paris entrusted the Deputy Mayor in charge of green spaces with **new ambitious objectives for greening the city by 2020: 100 hectares of green roofs and walls, of which one third will be dedicated to urban agriculture, 30 additional hectares of green spaces open to the public, the planting of 20,000 new trees.** At the same time, the City intends to "reclaim" the Inner Railway Ring and transform sports facilities into sports and leisure parks that fully contribute to the ambition of creating green spaces. In addition, the City of Paris will create roughly twenty "green streets".



Calliteara pudibunda, larva. © X. Japiot

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THE DEPARTMENTS OF THE CITY OF PARIS WILL CONTINUE THEIR WORK IN ORDER TO OBTAIN A BETTER UNDERSTANDING OF PARISIAN BIODIVERSITY

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The understanding of the biodiversity in Paris is continually improving, along with the sharing of data. A broad range of inventories and studies are being conducted by different stakeholders in the territory.

THE ISSUES RELATED TO PRESERVING BIODIVERSITY HAVE BEEN IDENTIFIED

The study of the capital's fauna and flora reveals real potential in a fragile balance. Of the 778 higher plants and 1,300 animal species recorded, at least 9 plant species and 159 animal species are protected at the regional or national level, and several are endangered. The main objective of these lists is to alert the public, developers, and decision-makers to the extent of the risks of disappearance or even extinction facing many species and communicate the need to develop preservation policies.



Euonymus europaeus fruit. © X. Japiot

Since 2010, a database of naturalists' field notes from the City (SERENA) brings together different observations made on the territory. To date, over 29,000 observations have been compiled. This tool makes it possible to respond to the majority of the questions and expectations of the various stakeholders (associations, the public, developers, managers), and provides an idea of the distribution of species in time and space. Nevertheless, this understanding of the territory's biodiversity requires further development, and must be shared even more.

A study was also conducted on the biodiversity and ecological continuity of the Inner Railway Ring. The study provided an understanding of this brownfield railway as a link between the large Parisian reservoirs. It revealed the presence of heritage animal species. These species use this ring for several purposes: for moving, as a migratory stopover, for shelter, reproduction, predation and feeding.



Phoenicurus ochruros © X. Japiot

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THE CITY OF PARIS HAS CHOSEN THE SINGAPORE INDEX FOR EVALUATING ITS BIODIVERSITY POLICY

The City of Paris is evaluating the urban biodiversity policy being implemented in the territory of Paris. Its aim is to measure trends over time and to draw up, at a given point in time, a portrait of the biodiversity of Paris. This evaluation must also specify the threats facing biodiversity, the benefits it provides, and provide local stakeholders with answers to help in preserving it. In 2015, with this enhanced knowledge of biodiversity, the City of Paris set out to calculate its Singapore index. In so doing, the City formalised its participation in the global reflection on biodiversity in urban environments. This tool for decision support helps to define the many concrete actions that must be strengthened in order to conserve habitats and maintain the populations in Paris.

PARIS LAUNCHES THE DRAFTING OF A NEW BIODIVERSITY PLAN

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In an international context that is rapidly developing in favour of biodiversity protection, the Plan for the preservation and strengthening of Biodiversity adopted in 2011 expressed the City's commitment to restoring nature and biodiversity throughout its territory. This plan, which grew out of a participative initiative of citizens, professionals and scientists, is composed of 30 actions that revolve around 3 themes:

- 1. further developing the green and blue corridors,
- making biodiversity a pivotal element of municipal action,
- supporting the departments of the City of Paris, raising awareness among citizens and mobilising stakeholders in the territory.

Today, a general revision of the 2011 Biodiversity Plan has become necessary, due to the fact that the objectives for this term are even more ambitious, and the legislative and regulatory context has changed through the Grenelle Laws. Furthermore, a Regional Ecological Coherence Scheme (SRCE) was voted on and the Law on Biodiversity will be adopted. Finally, the advances of the first years of the implementation of the 2011 Biodiversity Plan make it necessary for the objectives and nature of the actions to be developed further.

The new Biodiversity Plan, which should be finalised by autumn 2016, will be the result of concerted and participative efforts made with the stakeholders of the territory.



Villemin pond (10th). © S. Tabillon



André-Citroen garden (15°). © J.-P. Viguié



Linear Forest (19º). © J.-P. Viguié



Dragonfly (Calopteryx virgo) © X. Japiot

A NEW BLUEPRINT FOR THE PARISIAN ECOLOGICAL NETWORK IS TAKING SHAPE: THE NATURE PATHS

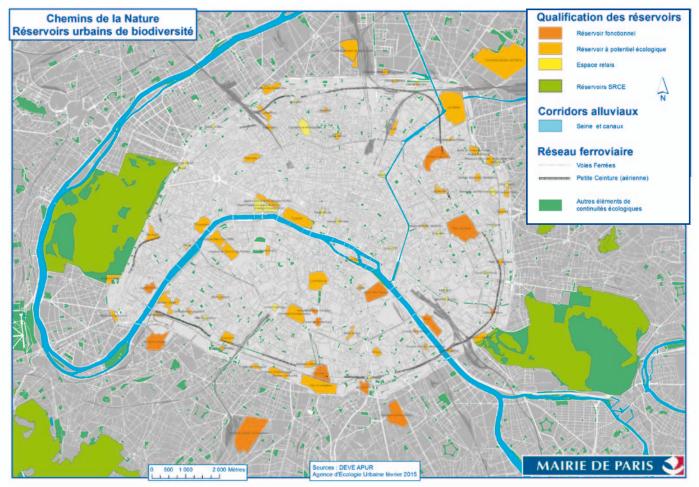
The green and blue corridors are made up of terrestrial and aquatic continuities, which connect reservoirs of biodiversity. The biodiversity reservoirs are source areas where plant and animal populations can find refuge, feed and reproduce. The ecological corridors allow the movement of plant and animal species and thus genetic mixing. Just as our own cities are connected by traffic routes, **this ecological network is a green infrastructure**. It will now be referred to as the Nature Paths, which will be part of the Regional Ecological Coherence Scheme (SRCE) of the Île-de-France Region, adopted in 2013.

Nature paths are also intended to create social and economic connections. They form a network of walking paths, "soft" transport options, and breathing space. These networks are also conducive to developing urban orchards and vegetable gardens and will contribute to the introduction of ecological and sustainable urban agriculture.

Finally, they contribute to the development of environmental benefits: creating green spaces, including in urban built environments, and contribute to improving air quality and the sound environment by increasing quiet spaces. This initiative supports the objective of reducing the effects of urban heat islands.

THE NEXT STEPS IN THE PARISIAN APPROACH

The diagnostic carried out in 2014-2015 on the territory made it possible to identify and evaluate the quality of Parisian reservoirs and the potential ecological corridors. They will be mapped along with the elements that fragment this ecological network and the breaks in continuity. The nature paths, to be formalised in 2016, will help to define the measures to be initiated in order to strengthen biodiversity, such as reducing breaks in continuity or creating new corridors and reservoirs. These measures will be defined on the different levels of the greater Paris Metropolitan area, with all of the relevant stakeholders: town halls, managers of green spaces, developers, landscapers, urban planners...



Nature paths – Reservoirs of biodiversity (orange), aquatic continuities (blue), railway track (grey). © Mairie de Paris, DEVE, AEU

THE GREENING OF PARIS CONTINUES

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Greening Paris to strengthen biodiversity is an initiative that takes place through two channels. The first is led by the City of Paris by creating new green spaces or walking paths, the second depends on the initiative of Parisians.

The municipal services have already opened 5.1 hectares of new green spaces over the 40 hectares planned for 2020, and have planted 4,800 trees out of an objective of 20,000. One of the highlights of 2014 was the creation of the Linear Forest in the 19th arrondissement, which is home to 3,300 trees. The City of Paris is also creating new planted walkways, which is the case in the woods of Paris. Some areas are closed to road traffic, so that the paths can return to the conditions of the forest.

Aquatic environments contribute to the blue Parisian corridors and are essential in conserving biodiversity.

They represent a natural solution for local cooling. The City is thus implementing a programme to create 40 ecological ponds. For example, an ecological pond has been installed in Jardin Villemin (10th). This new wetland area of 40 m², is made of filtering plants that recycle water with the help of a pump. It is home to animal species (dragonflies...) and spontaneous and wild plant species (Purple loosestrife, water mint...).

RESEARCH PROJECTS FOR GREENING PARIS

Conserving biodiversity demands taking quick action on the territory, yet profound reflection with the scientific world must also be involved. With this perspective, the Paris City Authority partnered with the RENATU research programme. The aim of the project is to analyse the renaturing process in dense urban fabric related to the infrastructures around urban linear transport and its influence on the territory of the Greater Paris metropolitan area.

In parallel, the City is associated with an ECOVILLE research project financed by the French National Research Agency on "greening walls as a tool of urban resilience".

FOCUS DU BREUIL SCHOOL AT THE HEART OF PROFESSIONS RELATED TO PLANTS AND BIODIVERSITY

This institution of the City of Paris prepares youth and adults for a diploma in the field of landscaping, from the CAP vocational certification in agriculture to a vocational degree. The school has developed an offering for professionals and amateurs. On the 23 hectares open to the public, it presents an exceptional botanical collection throughout themed gardens. The school received the 2014 "Jardin Remarquable" label for outstanding gardens, awarded by the Ministry of Culture and Communication.

The gardeners are trained on-site in the practices of observation and inventory of the fauna and flora and the biodiversity of urban trees. The offer of gardening courses for amateurs



Du Breuil School garden. © C. Noël

has been enhanced in 2015 with new training courses in partnership with the Municipal Classes for Adults, on the theme of urban agriculture: winter vegetable garden, summer vegetable garden, urban orchard.

INSTALLING NATURE ON BUILDINGS AND IN PUBLIC PLACES

A unique aspect of the programme for this new term is the development of green spaces in public areas, on walls and on the roofs of buildings. An inventory is underway of potential surfaces to turn green, whether they be public, city concessions, or private.



Rue Buffet school (17th), green wall. © S. Tabillon

SOCIAL HOUSING COULD BE HOME TO 5 HECTARES OF GREEN SPACE BY 2020

To help support providers of social housing in this area, the City has set up specific financing schemes for existing buildings. Two types of financing schemes relate to the renovations:

- €160/m² of the green surface created on roofs and walls.
- €10,000/urban agriculture project.

All new building constructions must have an area of green space integrated into the project.

Paris awarded at the 4th International Green Roof Congress. This international network raises awareness on issues of connected green roofs and walls. The City won an award for its strategy in creating green spaces on buildings.

PARISIANS GREEN THE CITY

Paris seeks to get Parisians more involved in developing their city. They can therefore choose the investments that the City should make, through a participatory budget, and propose initiatives through calls for ideas made on the internet (see the chapter "contributing to the fulfilment of others"). These systems for citizen participation revealed that greening the City is a priority for residents. In 2014, for example, at the time of the first participative budget, the "gardens on the walls" project involved greening 40 building walls or works of art was voted in. In 2015, les Parisians chose to devote one third of the budget to projects for making green space, for a sum of ≤ 11.8 M.

For the "Green near me" call for proposals launched in July 2014, residents were also active. They made over 1,500 proposals for greening 200 spaces spread throughout Paris.

In parallel with these initiatives implemented by the City of Paris, it was necessary to allow Parisians to green public areas directly. Since June 2015, residents, associations, shops and companies can request a **"green space permit"** that can simply be requested on a web platform. This authorization to use the public space is granted free of charge. The initiative proved very successful, with over 350 green space permit requests filed three months after its launch.

Calls for projects related to creating green spaces on buildings and developing urban agriculture should soon be launched. They will be designed to be showcases and demonstrate the capacities of Parisian homeowners (private and public, including the City of Paris) in greening walls and the roofs of the existent buildings and developing urban agriculture projects. These calls for projects will highlight the involvement of these pioneer owners.



"JARDINS DE BABYLONE"

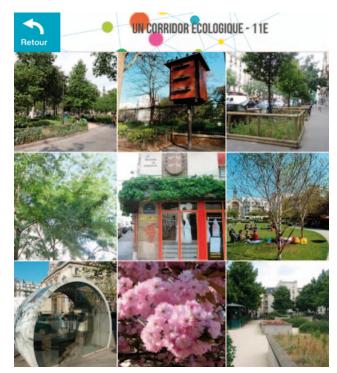
This is a company with over 10 years of experience in creating indoor and outdoor plant walls, with structures designed using recycled plastic to hold plants from the Paris Basin that are favourites of urban pollinating insects.

Several municipal initiatives are aimed at raising awareness of green spaces among Parisians and assisting them in becoming urban gardeners.

To help citizens understand the issues described in the Plans for Climate Energy, Biodiversity and Sustainable Food, the City is organising **guided tours** in the capital. Between 2014 and 2015, over 45 visits were offered to over 4,000 Parisians by lecturers on the subjects of green spaces at the base of trees, walls and roofs, the eco-labelling of Parisian gardens and their history. This is an original way to discover new environmental designs in terms of movement, habitat, urban planning, feeding, waste management, biodiversity and renewable energy (solar roofs, geothermal energy...).



Along with these visits, **the free smartphone application "Balades Paris Durable"** (Sustainable Paris Walks) is regularly updated with new routes that Parisians can follow individually or as a family. It offers walking itineraries for discovering urban biodiversity. 15 different routes are available on the Paris.fr website and 3 new itineraries related to COP21 are online in 2015.



Sustainable Paris Walks . © Mairie de Paris

TWO CENTRES ARE OPEN TO INDIVIDUALS AND PROFESSIONALS FOR INFORMATION AND SUPPORT FOR PROJECT CREATING GREEN SPACE OR URBAN AGRICULTURE

Maison Paris nature (12th)

Missions: promote a better understanding of biodiversity in the city and support projects that promote biodiversity.



Maison Paris Natutre (12th). © Paris.fr

Maison du jardinage (12th)

Mission: develop participative green spaces with local players in an environmentally responsible manner.



Maison du jardinage (12th). © Mairie de Paris SCEV

URBAN AGRICULTURE EXPANDS THROUGHOUT THE CAPITAL

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Urban agriculture can serve many purposes related to sustainable development, creating environmental, economic and social benefits. For example, based on the plant species chosen and the means of cultivation, it can enrich plant life in the city and its biodiversity. It is a local economy, creating jobs and creating local connections. It offers quality food products without the need of transport or storage, it brings to light the potential of forgotten spaces, uses urban waste, and creates a diverse urban landscape...

In Paris, urban agriculture is a priority of this term of office with, in particular, the **objective of creating 33 hectares of productive roofs and walls by 2020**,

the equivalent of 330,000 m². An inventory of surfaces able to support agriculture on buildings in the City is underway. At the same time, orchards and vegetable gardens are being created in schools. The development of educational mini-farms is being discussed. From now on, major development projects must meet the criteria of social mixing of buildings for housing, offices, incubators, third places, areas of collective living and productive plants. This is the case, for example, of the future Chapelle International Freight Hall (18th) which will feature a roof farm of 5,000 m².

Private initiatives are rapidly growing following the first shared gardens, precursors in this field. Among the new urban farmers are associations, hotels, restaurants, and teaching institutions. To understand the issues of urban agriculture better and mobilise the relevant stakeholders, in 2015 the City launched a cycle of 8 conferences that have already attracted over 2,000 Parisians (architects, landscapers, researchers, project leaders, private individuals, developers, property managers, associations, etc.).

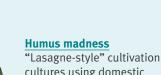
CALL FOR PROPOSALS FOR THE INNOVATIVE CREATION OF GREEN SPACES AGRICULTURAL PROJECT WINNERS DEPLOYMENT IN 2015



Paris beneath the strawberries Vertical roof production

of strawberries, Galeries Lafayette (9th).





cultures using domestic food waste, Stade de la Muette stadium and Henri de Montherlant swimming pool (16th).

Macadam Farms Productive soil-less systems: aquaponics, hydroponics, bioponics, Maison de l'Air, Parc de Belleville (20th). © J.-O. Bled









V'île fertile

vegetable farm based on the principle of recovering urban organic waste (Garden of Tropical Agriculture), Bois de Vincennes (12th). © J.-O. Bled

Urban orchards

Fruit production bringing together educational aspects and efforts for raising awareness, Halle Pajol (18^h). © Vergers urbains

Zambu

le p'tit follo: urban vegetable garden on wheels, Maison du jardinage, Parc de Bercy (12th), experimentation ended. © Zambu

Up cycle

Cultivation of oyster mushrooms on recycled coffee grounds, Marché de Rungis (Val-de-Marne) © J.-O. Bled

URBAN AGRICULTURE, SOURCE OF INNOVATION

In 2013, the City of Paris and Paris&Co launched a call for proposals on the innovative creation of green spaces. **This initiative is based on the principle of making municipal resources available for selected entre-preneurs and associations** in order to experiment with new forms of agricultural activities and new economic models over a period of 3 years, or to assist them in finding areas for setting up their activity. Several winning projects were deployed in 2014-2015.

111 SHARED GARDENS CULTIVATE FRUIT AND VEGETABLE

Since they were created in 2002, shared gardens have always had a three-fold objective: create green spaces throughout the city, get citizens involved in improving their living environment, and encourage the development of urban agriculture. Created or maintained collectively by residents, a shared garden promotes ecological garden through the "Green Thumb" Charter, and conserves biodiversity. In 2015, with 8 new sites created, Paris has over **111 shared gardens**, 7 of which are solidarity gardens (approximately 5 hectares). A few gardens have also developed a therapeutic aspect by welcoming medical facilities. Over 3,000 members participate in the shared garden network.

VEGETABLE GARDENS IN PARISIAN SCHOOLS

Several hundred educational garden sites have made their homes in schools or childcare centres. The main objectives of the "Cultivate my School" programme have been completed. Since the 2015 October school holiday, all Parisian schools have been equipped with educational vegetable gardens. These resources allow staff and teachers to address topics more easily with the children, such as climate, biodiversity in the city, nutrition and sustainable consumption, the moderate use of water, environmental health with zero phytosanitary risk and organic waste. The "Orchard in my School" programme is currently being rolled out. In 2014, orchards containing 89 fruit trees were installed. Roughly forty new orchards will be planted during the winter of 2015-2016. Composters and worm composters have also been installed in certain schools.

THE PARIS FARM TEACHES PERMACULTURE WITH A PARTICIPATIVE APPROACH

Located in the woods of bois de Vincennes (12th), the **Paris Farm** is a farm of 5 hectares, managed in an environmentally responsible manner. It welcomed 54,700 visitors last year. As a resource centre, this farm is aimed at raising public awareness and mobilising local stakeholders around the issues of sustainable production and food in the urban environment. In 2014, the Farm began a journey in discovering permaculture. The 6 workshops alternate practical activities with times of interaction and included 300 participants. 2,000m² were developed through this participative approach in 2014 and 2015. The apprentice urban farmers learn how to set up terraces, prune hedges or choose plants, all key permaculture principles.



Permacutlure workshop. © C. Philbert

EDUCATIONAL HENHOUSES DEPLOYED IN PARIS

The City supports the development of educational and local mini-farms. With this ambition in mind, 14 henhouses were built by the City of Paris or private individuals and are present in 7 arrondissements. They housed 78 hens and roosters in October 2015. There is even an educational henhouse in the garden of Paris City Hall (4th).



VENI VERDI

This is an association that works to promote urban agriculture that is social, participative and with a focus on solidarity. It seeks to involve children, parents, residents and teachers in its goal of transforming green spaces and unused roofs into vegetable gardens. It maintains vegetables gardens and gardens in secondary and primary schools.

THE ECOLOGICALLY RESPONSIBLE MANAGEMENT OF GREEN SPACES CONTRIBUTES TO BIODIVERSITY

Adding plants to public places, roofs and walls, and opening new green spaces requires ecological management principles to be employed in order to strengthen Parisian biodiversity.

The municipality leads by example in this area in the management of its own property, which is associated with the national eco-label, ECO Jardin, which certifies the ecological management of green spaces. Strategic points are evaluated, which include the absence of pesticide and chemical fertilizer, the moderate use of water, staff training, the implementation of differentiated management techniques, and the reduction and recycling organic waste. Audits carried out by an independent organisation make it possible to obtain the national label when the key criteria are respected. At the end of 2015, all green spaces in Paris will have been audited. 366 green spaces have obtained the label and 87 will receive it by the end of 2015.



THE INNOVATIVE MANAGEMENT OF AVENUE TREES

In order to ensure the reactive monitoring of the trees in the territory, the management of the 200,000 Parisian trees relies on a database, or mapping. Since March 2014, this monitoring is carried out using an application developed by the departments of the City of Paris and can be used on a standard touch screen tablet. In 2014, this innovation was awarded the Prix Territoria and a mobile application.



Arsenal harbour (4th). © J.-B. Gurliat

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THE GLOBAL, ECOLOGICALLY RESPONSIBLE AND FAIR WATER MANAGEMENT IS FUNDAMENTAL FOR THE CAPITAL

The basic guidelines for encouraging balanced management of water for all users (citizens, farmers, industry) are incorporated into the River Basin Management Plan (SDAGE). This document complies with the European Water Framework Directive which set the objective of maintaining or restoring surface water and groundwater to good levels in quantity and quality in all European Community countries.

With climate change, episodes of rain may become more frequent and intense in Paris. The consequences of this phenomenon can already be observed: combined sewer overflows into the Seine during average rains or the flooding of certain streets in Paris during significant storms. In order to control these phenomena better, the City is leading a global reflection with the purpose of installing permeable pavement, facilitating the infiltration of rain water and keeping it from flowing into the water treatment network. This set of measures will make up the future Paris Rainwater Plan and will contribute to improving the water quality of the Seine River.

THE RAINWATER PLAN IN PARIS

The implementation of the principles in the future Paris Rainwater Plan will require the development of operations for creating systems for infiltration into the ground and for the permeability of surfaces. These techniques are aimed at reducing the arrival of large volumes of rain water in the sewer system, which are responsible for the deterioration in the quality of natural environments. The goal of this regulatory text is also to reintegrate urban rain water into the large water cycle.

For example, the new Bercy Charenton district (12th) will include humid areas included in the green spaces, on the pavement, at the foot of trees, as well as watershed areas where rain water will be collected. Underground or open storage areas and discharge into the Seine will complete this system. Other development operations will incorporate this system as well.

In order to carry out the instructions of the future Rainwater Plan in both the private and public sector, the municipality has initiated research on the technical alternatives that are best adapted to dense urban tissue. The solutions that conserve water resources will be prioritized, such as plant solutions (rain gardens, plant roofs, swales), roof water retention systems for domestic or agricultural use. Other systems are also available: open air infiltration basins, infiltration by porous overlay on the ground or by buried systems (wells and infiltration trenches). These systems also contribute to making the city more beautiful, limiting the carbon footprint of human activities, and have a very positive impact in fighting against urban heat islands.



Pavement layout. © Mairie de Paris

In order to achieve better performance, a combination of these solutions could be adopted. Each development project is now part of an attentive study of techniques to be implemented in the region, with the aim of dealing with the rain closest to the place it falls.

The City works in close collaboration in this area with the Paris Water Board (Eau de Paris), the public company in charge of producing and distributing water in Paris. This partnership is within the framework of a legally binding contract of objectives agreed to by the two entities.



Experimentation spraying non-drinking water on the street in rue Lesage (20th): with a gain of 12°C / unsprayed surface. 0 Mairie de Paris, STEA-DPE

THE MAIN ACTIONS OF EAU DE PARIS IN 2014 AND 2015

Since 1st January 2010, Eau de Paris has extracted, transported, treated and distributed an average of 483,000 m³ of drinking water per day to 3 million users. Despite the decrease in regular consumption over the course of the past 5 years (roughly -1.5% per year), Eau de Paris has obtained and maintained a high standard of maintenance and enhancement of available assets for storing and transporting drinking water. Through systematic searches for leaks and the replacement of pipes in poor condition, the public water network achieved a yield of 91.4% in 2014 whereas the national average was 80%.

The continued improvement led to Eau de Paris being awarded triple certification in 2014 (Quality, Environment, Safety). This global management system is based on 3 benchmarks: the ISO 9001, OHSAS 18001 and ISO 14001 standards. In order to develop a forward-looking vision of the drinking water supply system, Eau de Paris invests 0.83% of water sales revenue in research activities, which have increased by over 100% since 2010.



Eau de Paris, Water Pavilon (16th) © E. Chaix

Eau de Paris is committing to putting users at the heart of water services. For the third consecutive year, the public company was designated "Customer Service of the Year". During the 5 years of the contract, the price of water has remained below the ceiling fixed by the objective contract (€1.0464/m³) for production and distribution, which is the direct responsibility of Eau de Paris. The company guarantees access to water for all, including the most economically disadvantaged. In 2014, it set aside €500,000 for the Solidarity Fund.

The **non-drinking water** service is also part of objective contract of Eau de Paris. Since 2012, the public company has offered companies and authorities alternatives to drinking water through the non-drinking water offer. As indicated above, this service is now considered an essential and pivotal element of a sustainable city. For this reason its development has been incorporated into a new scheme of uses and non-drinking water network, adopted by the Council of Paris in September 2015.

THE WATER QUALITY OF THE SEINE RIVER AND THE CANALS IS IMPROVING

The sampling of water from the Seine and the canals to be analysed for potability or other uses requires first addressing the issue of its quality. The regular monitoring of its quality provided observations of a clear drop in pollution over the past few years. This led to the reintroduction of aquatic plants and the return of roughly thirty fish species. This improvement is due to work done to upgrade the treatment network which reduced the volume of combined sewage flowing directly into the Seine. The quality of the river water remains at a medium level. The network of Parisian canals is fed by the Ourcq River and by tributaries of the Ourcq Canal. Roughly 300,000 m³, or over 60% of the capital's non-drinking water needs, goes through this facility each day. The actions listed in the "Guide for the management, monitoring and development of the canals of Paris", drafted in 2012, allow the water quality to be maintained at a stable level.



CONTRIBUTING TO THE FULFILMENT OF OTHERS THROUGH CIVIC INVOLVEMENT ince 2001, the City of Paris has increasingly involved Parisians in municipal policy. Beyond the examples of organised consultations, Paris works on a daily basis, in renewed and innovative ways, with those who use its territory: residents, district councils, companies or associations. The rise of this participation and civic commitment represents a major democratic pledge towards guaranteeing social cohesion. It also contributes to each individual's fulfilment, and thus better conditions for living together.

UPGRADED FORUMS

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DISTRICT COUNCILS ACTIVELY CONTRIBUTE CITIZEN MOBILISATION

Today Paris has 123 **district councils**. Their management and organisation depend on the town halls of their arrondissement. Depending on the circumstances, district councils are made up of associations, qualified individuals, and residents. All Parisians, regardless of age or nationality, can participate on a voluntary basis. The council is a place to find information, a listening ear, debates and expression on district development, on district life, or the improvement of living conditions. While it does have its own budget, the district Council is not an elected representative body. It can, however, submit requests and proposals to the Council of the arrondissement.

Created in 2003, the Paris Youth Council (CPJ) was formally consulted on a number of municipal projects. This Council is a participative democratic forum that allows young Parisians to play a role in defining and implementing municipal policies. CPJ members gave their opinions on issues including projects for development, on the Parisian programme for youth autonomy, and on COP21. The youth also addressed administrative services and relevant elected officials in order to provide views to be taken into account during the deliberations of the Council of Paris.



Paris Youth Council. © Mairie de Paris, DJS

SINCE 2006, 14 ARRONDISSEMENTS HAVE PROGRESSIVELY CREATED PARENT COUNCILS

This civic forum provides an opportunity to actively participate in the life of early childhood institutions. These forums for discussion bring together arrondissement mayors, elected parents and early childhood professionals. In 2014, 225 establishments had an establishment council or were in contact with a parent council. 799 parent-representatives participated in debates with themes mainly centred on equipment, nutrition and children's health.

THE PARISIAN NIGHT COUNCIL WAS CREATED IN DECEMBER 2014

In the extension of the General Assembly of the Night, which met in 2010, the City wished to create a Night Council to participate in managing nights in Paris and achieve more peaceful relations between residents and those enjoying the city at night. The purpose was to express and share problems, and propose solutions in a collective manner. This forum is organized into 5 colleges: institutions, associations, professional organisations and qualified individuals.

ENCOURAGE RESIDENT PARTICIPATION IN OTHER WAYS

The City of Paris wishes to allow citizens to determine their priorities concerning the use of a part of the Municipal investment budget.

RESIDENTS DECIDE ON THE ALLOCATION OF 5% OF THE CITY'S INVESTMENT BUDGET

On the one hand, Parisians can submit proposals for investment and, on the other hand, they can vote for the circulated proposals that they deem a priority. The implementation of the participatory budget represents a major democratic innovation, of unprecedented scale: Parisians are invited to give their opinion directly on the allocation of 5% of the City's investment budget, which by 2020 will represent represents half a billion euros.

The **participatory budget** strengthens ties between citizens, institutions and their representatives, and ensures more transparency in the management of public finances. This initiative also keeps people informed of public policy and takes advantage of the expertise and creativity of Parisians.

Open to all Parisians, regardless of age or nationality, the first participatory budget was very successful, with over 40,000 voters. The allocated sum in 2014 amounted to \notin 20 million. In 2015, Parisians were able to propose investment projects for their arrondissement or for all of Paris amounting to \notin 75 million. The 8 winning projects chosen in 2015 were for the development of "softer" forms of mobility, solidarity with individuals in precarious situations as well as adding green spaces to the city. In addition, 180 arrondissement projects were selected and will also be developed in 2016.

THE WEBSITE "MADAME LA MAIRE, I'VE GOT AN IDEA" ALLOWS PARISIANS TO HAVE THEIR SAY

Beyond the participatory budget, the Mayor of Paris also desired to involve Parisians closely in the major changes in the territory. Therefore, on the website "Madame la Maire, I've got an idea", users have been invited to submit their contributions to the project of the future Greater Paris metropolitan area and the vast projects for improving 7 major Parisian squares that are full of history and symbolism: Bastille $(4^{th}, 11^{th}, 12^{th})$, Fêtes (19^{th}) , Gambetta (20^{th}) , Italie (13^{th}) , Madeleine (8^{th}) , Nation $(11^{th}, 12^{th})$ and Panthéon (5^{th}) .

PARIS CREATES AN APPLICATION FOR COLLECTIVELY IMPROVING THE CITY

Launched in June 2013, the **DansMaRue** (InMyStreet) application allows users to report any issues detected in public places to the municipal services (uncleanliness, graffiti, defects in the pavement, etc.). 90,000 messages have been recorded using this application. Depending on the type of issue and its location, the closest relevant department receives the information and schedules the most suitable intervention. The user is able to leave his or her email address, allowing them to follow the course of action for the reported abnormality. Furthermore, over 1,000 people have been mobilised with hygiene employees to clean up their district with the first edition of "Paris fais-toi belle". 15,000 litres of waste were collected.



Hygiene employee explains how to clean the streets. © J.-B. Gurliat

PARISIAN CHILDREN MAKE PROPOSALS FOR COP21

In preparation for COP21, to be held in Paris in December 2015, it seemed crucial to consult little Parisians on their present and future, so that they can think about it and come up with some proposals. Over the entire 2014-2015 school year, workshops and events have been created for children on themes directly connected with the COP21 objectives, such as the reduction of primary greenhouse gases, the erosion of biodiversity, and the circular economy. Among the children's creations is a sustainable toy library made with recycled materials.

10,000 children worked together on imagining these sustainable and appealing districts in April 2015. The aim of this event, which took place over two weeks, was to produce works, imagine energy-saving districts or buildings that are more environmentally friendly and nicer to live in, and to enhance urban biodiversity. In addition to the exhibition of works created by the children from recycled materials, 13 workshops were proposed to all the children.



Children's projects – Cristino Garcia (20°). © CAUE de Paris

TOWARDS A "MORE ECOLOGICAL ADMINISTRATION"

In order to obtain proposals and ideas from City personnel with the goal of finding more eco-responsible administrative approaches, a consultation took place at the beginning of 2015. Seven ideas were selected: facilitate the practice of vegetarianism; introduce centralised switching off of lighting; encourage "softer" modes of transport for interventions; develop the practice of teleworking; computerize certain internal procedures; fight against food waste and create a circular economy platform. The implementation of these actions will begin in the second half of 2015.

THE CITY ENCOURAGES THE PARTICIPATION OF YOUNG CITIZENS THROUGH CIVIC SERVICE

In 2014, the Paris community welcomed 159 young people, in order to offer them a volunteer experience serving the common good. Some young people then led missions related to protecting the environment.

USERS CONTRIBUTE TO THE CREATION OF THE METROPOLIS OF GREATER PARIS

On 1st January 2016, Paris and the communities of départements of Seine-Saint-Denis, Hauts-de-Seine and Val-de-Marne will join to form the Greater Paris Metropolitan Area, in order to work together in important areas such as urban planning, housing, emergency housing, the fight against climate change, as well as economic development. The Greater Paris Metropolitan Area will be a new political body, a public establishment of intermunicipal cooperation, bringing together 126 municipalities, including Paris, over 762 km², which is 7 times the surface of Paris. It represents 6.7 million residents.

Before the future metropolitan area is born, the Mayor of Paris decided to inform Parisians about it and consult with them in order to provide them with the opportunity to take part in creating the metropolitan project. Starting in January 2015, public meetings were organised within the context of the "Grand Paris Citoyen" campaign. These meetings were backed by a campaign on the collaborative platform "idee. paris" centred around 5 themes: housing and development, the influence of the metropolitan area, the fight against inequalities, ecological transition and mobility, and, finally, culture and identity.

THE CITY OF PARIS STRIVES TO INVOLVE RESIDENTS AND LOCAL BUSINESSES IN DEVELOPMENT PLANNING

PARTICIPATORY MEETINGS ORGANISED DURING PLANNING STAGE OF MIXED DEVELOPMENT ZONES

Prior to the creation of **Mixed Development Zones** (ZACs), the City organises workshops on different themes in the form of participatory planning meetings. Guided tours of sites are also offered. The goal is to involve residents in development issues while bringing them together with the professional project managers.



Youth equipment workshop. © Talking Things

In order to organise and better inform the public about ongoing urban projects, a dedicated website has been created: "Imaginons Paris Demain" (Imagine the Paris of tomorrow).



© Mairie de Paris

INNOVATION IN 23 SITES TO "REINVENT PARIS"

The city wishes to carry out an urban innovation experiment of unprecedented scope:

- Functional Innovation in designing smart buildings which are multifunctional and changeable.
- Environmental Innovation in energy efficiency as well as in renewable energy production and recovery, in interactions with the city, in revegetation, or in carrying out the "zéro déchet, zéro carbone" (zero waste, zero carbon) objective.
- Innovation in occupying new spaces: basements, rooftops, or abandoned brownfields. Finally, innovation in project management by consulting with local communities and in terms of financial arrangements.

On the theme of innovation, the "<u>Réinventer Paris</u>" call for proposals (Reinventing Paris) was launched in November 2014. It concerns 23 sites ranging from brownfields to private mansions. Operations on these sites include the ZAC (Mixed Development Zone) Paris Rive Gauche (13th arrondissement), Ourcq Jaurès (19th), Clichy Batignolles (17th), the Éole-Évangile triangle (18th) in Northeast Paris. An international jury will choose the winning projects in late 2015-early 2016. They will be able to rent or buy plots on which their projects can be carried out.

LOCAL AUTHORITY SUPPORT FOR ASSOCIATIONS

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PARIS IS HOME TO OVER 60,000 NOT-FOR-PROFIT ASSOCIATIONS

Every year more than 550,000 volunteers participate in Parisian associations. This represents 120 million volunteer hours a year and the equivalent of the activity of a very large company with 66,000 employees. There are currently as many as 65,000 active associations in Paris with 5,000 being created each year.

The not-for-profit sector represents an essential element of Paris's social economy. A total of 113,000 people are employed by 10,500 associations. Salaries paid by Parisian associations amount to \in 3.5 billion. 62% of associations with employees plan to create jobs.

PARISIAN LOCAL AUTHORITY IS COMMITTED TO NOT-FOR-PROFIT JOBS

The City of Paris remains the number one public partner for the territory's associations. The city has relationships with 17,300 associations. 40% of them are supported by one of the 20 Parisian "Maisons des Associations" (MDA) (Association Centres) or "Carrefour des Associations" (CAP) (Association Crossroads). The City of Paris has set up a digital platform Jemengage.paris in order to give more visibility to the general interest missions of associations, and to help Parisians join associations by specifically choosing a type of mission, meeting dates or times. In the month of September 2015 alone, over 1,700 volunteers, or 60 people a day, signed up to participate in an association.

OVER 80 ASSOCIATIONS BENEFIT FROM "INFILL PROPERTY" PREMISES

Local authorities' "Infill property" is private estate which is not assigned to a department or public establishment. To make these premises available, the City takes an inventory of spaces likely to be vacant for sufficient periods of time. Then, an agreement is concluded with the association for the time it occupies the premises.



11 rue Dupré (18th). © Mairie de Paris

THE PARTICIPANTS IN A SUSTAINABLE PARIS PLAN (ACTEURS DU PARIS DURABLE) TURNS THE SPOTLIGHT ON PARISIANS INVESTED IN SUSTAINABLE DEVELOPMENT

Created in 2011, this plan results from the City's drive to promote and support local initiatives for sustainable development. Today the plan brings together more than 2,600 participants representing over 300,000 people.

A website presents eco-friendly measures that have been taken in Paris and the people behind them. This site fosters exchanges, and offers for example, an events calendar and a contact directory. Eco-friendly action sheets and a newsletter complete the toolbox. There is a venue dedicated to the cause for meetings and conferences: **the Centre for Participants in a Sustainable Paris** (La Maison des Acteurs du Paris durable), located in Marais.

To give more visibility to these original Parisian ideas for supporting the environment and sustainable development, Supporting a Sustainable Paris (Promotion du Paris durable) is organised every year, after a proposal for applications. The 10 chosen participants receive personalised support in order to develop their projects as well as training in strategy and communication. They work in sectors ranging from restaurants to hotels, from construction to all types of recycling, from sharing to citizen collaboration, from finance to delivery, right through to energy. The winners of the 2015 Supporting a Sustainable Paris (Promotion du Paris durable) 2015 are presented throughout this report.



"LES PARQUES"

"Les Parques" (residents committed to the future) is an association that seeks to better its neighbourhood by working with residents who act daily to "change the world", improve their living environment, and create social cohesion through green family groups, art workshops, and shared neighbourhood garden projects.



Intergenerational garden. © J.-P. Viguié

REINFORCING SOCIAL COHESION AND SOLIDARITY BETWEEN TERRITORIES AND BETWEEN GENERATIONS

he local authority team is increasing its efforts to provide Parisians with a fairer and more united Paris. The City is therefore introducing measures and opportunities adapted to the situations of the most vulnerable in society. These measures include help for people living on the streets, housing availability, health and protective services for children, and support for finding work. Promoting autonomy in people with disabilities and the elderly is a priority as well, along with balancing out different territories. • • • • • •

PARIS IS RALLYING ITS FORCES TO COMBAT LARGE-SCALE EXCLUSION

PARIS IS MAKING THE FIGHT AGAINST LARGE-SCALE EXCLUSION ONE OF THE MAJOR CAUSES OF THIS TERM

Reportedly 3,000 to 5,000 people live on the streets in Paris. This population has become more diverse with the arrival of numerous families, women, and young people. Real efforts to make housing available have been undertaken by the State and by the City of Paris. And yet, full access to all rights remains problematic for these populations.

Institutions and field workers were associated with the creation of the Parisian Pact against large-scale exclusion (2015-2020). This pact aims to fulfil this group's needs and create pathways for employment opportunities. The 106 acts are divided into 5 different areas of focus.

The major methods of intervention in financial aspects, housing assistance or long-term social and professional integration revolve around different measures described hereunder.

PREVENTION SO THAT PEOPLE WILL NOT HAVE TO LIVE ON THE STREETS

106 ACTS DIVIDED INTO

RIGHTS

AREAS

APPOINTING A SINGLE ADVISOR PER PERSON AND COORDINATION OF ALL PARTICIPANTS

CREATING SOCIAL INTEGRATION AND LONG-TERM EMPLOYMENT OPPORTUNITIES FOR EVERYONE DIRECT INTERVENTION FO HELP PEOPLE LIVING ON THE STREETS

THE SOLIDARITY FUND FOR HOUSING IN PARIS (FSL) HELPS HOUSEHOLDS IN NEED

This Fund includes several types of assistance for households in need: direct financial assistance (for accommodation, energy, and water) and indirect assistance through social support for housing and mediation services for renting.

The Paris local authority has therefore organised a "United Risk-Free Renting" plan which aims to increase the housing supply for the lowest-income families. It seeks to make more temporary housing available, thus offering an alternative to hotel accommodation.

A Commission for coordinating preventative measures against evictions has also been created to take a census of families likely to be evicted and quickly find alternative solutions with the City's partners.

REFORM FOR HOTELS TAKING IN HOMELESS FAMILIES CONTINUES

Since 2014, the Social Samu (emergency service) has paid the entire cost of hotel rooms, through an agreement signed with the local authority during this term. This strengthens its ability to negotiate prices with each hotel and guarantees decent accommodation. Around 1,000 families were taken in since the beginning of the measure in October 2013, for a total cost of around \notin 860,000.

MORE EMERGENCY SHELTER CENTRES FOR THE WINTER PLAN

The City of Paris and local authority landlords provide the State with temporarily uninhabited sites in order to create **Emergency Shelter Centres** (CHU). The costs of organising these centres is paid for by the State and by the City of Paris. An operator then manages the premises. In order to further the City's efforts in its fight against large-scale exclusion, a study will be carried out into the development of modular shelters on vacant land under the management of the City.



57 bd Sébastopol (1st). © Mairie de Paris

IN THE SCOPE OF LONG-TERM PROFESSIONAL INTEGRATION MEASURES, THE "FIRST HOURS" PLAN IS A KEY STEP TO SECURING EMPLOYMENT OPPORTUNITIES

This plan was the subject of an innovative two-year experiment in work programmes. It offers the possibility of a slower pace for people suffering from great economic hardship with the homeless being the first to benefit. The plan allows the duration of the work week to be adjusted on an individual basis. It is then gradually increased until the employee is able to work 16 hours a week (or 72 hours a month) on an assisted contract. The employee can then be taken on by the work programme he or she is employed by or elsewhere. Between 2011 and 2015, 10 associations chose to participate in this plan and took on 177 people.

THE PARISIAN PACT TO FIGHT LARGE-SCALE EXCLUSION OPENS TENNIS COURTS IN ÉLISABETH STADIUM (14TH)

This is a great example of the part of the Pact concerning access to sports activities, specifically tennis. The Youth and Sports Authority, in partnership with the Paris Table Tennis League and the Restos de Coeur (charity that provides food for the needy), opened the tennis courts in the Élisabeth stadium (14th) to people who benefit from the Restos du Cœur.



Élisabeth Stadium (14th) - Restos du coeur. © Mairie de Paris, DJS

THE CITY IS DIVERSIFYING ITS AID POLICIES FOR CHILDREN AND FAMILIES

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Protecting children and helping families more effectively are crucial policies for the new term of office. <u>Various</u> <u>programmes exist</u> already, but they must be adapted to confront new concerns. Since children's health and their success or failure in school are often interconnected, the City is boosting these specific programmes.

"CREATING THE PARIS OF CHILDREN": THE NEW PARISIAN STRATEGY FOR CHILDREN AND FAMILIES

This strategy is composed of four goals: protecting the needs and fundamental rights of Parisian children, promoting early childhood learning and fulfilment, developing family services, and creating a benevolent city with and for children and families. A method has been selected which includes the participation of institutions, partnerships with associations, parents and children themselves.

THE DEPARTMENTAL PLAN FOR CHILDHOOD PROTECTION (2015-2019) ADAPTS TO NEW ISSUES

This plan is being developed during a time of significant change, in particular after a sharp increase in the number of isolated foreign minors. This development requires an emergency review of the City's accommodation capacity. Optimising housing supply and setting up special management tools for more efficient handling of children entrusted to Parisian services are currently underway. This plan is a great prevention measure with numerous factors coming into play from the very beginning of childhood.

STRENGTHENING OF THE SOCIAL PREVENTION MISSION TO HELP THE MOST DISADVANTAGED CHILDREN

This mission mainly concerns difficult neighbourhoods in which 35 social centres carry out educational programmes for children, working with volunteers and professionals. Their aim is to help residents break out of isolation, to prevent and reduce evictions, and to unite people by getting them involved in collective projects. 61,000 volunteers contributed to these projects in 2014 and over 16,000 children were monitored by specialised prevention teams.

CHILDHOOD WELFARE SERVICE PROVIDES MATERIAL, EDUCATIONAL AND PSYCHOLOGICAL SUPPORT

5,106 minors and young adults benefitted from this program in 2014. It includes a committee for collecting concerns and providing alerts relating to minors in danger.

RESIDENTIAL HOMES FOR CHILDREN AND YOUNG PEOPLE DEVELOPED AND DIVERSIFIED

To respond to the needs identified by the previous childhood protection plan (2010-2014), 69 new, available places in residential homes for children or young people were created in 2014. Significant investments aimed at improving living conditions for children entrusted to Childhood Welfare have also been achieved. As a result, the Eleanor Roosevelt Home for Children opened its doors in January 2014 on Rue Paul Meurice (20th). It can house 90 children under the age of 18 in emergency situations.

SPECIFIC MEASURES TO IMPROVE HANDLING OF THE INFLUX OF FOREIGN ISOLATED MINORS

The 2013-2014 period was marked by the massive arrival of foreign isolated minors. An unaccompanied minor service was created to follow situations more closely, while initial facilities and shelter were entrusted to France Terre d'Asile (France Land of Asylum association). In 2015, 15 practical measures are being put into place, reflecting young people's evolving needs while in the care of public services and during their integration.

MEDICAL AND SOCIAL FOLLOW-UP SERVICES FOR CHILDREN ARE A PRIORITY FOR THE CITY OF PARIS

The mother and child health service (PMI), composed of 60 centres, supports families (pregnant women and children aged o to 6) through a consultation plan and support for parents as well as home visits. Screening is developed and adapted for key ages in cognitive and physical development. Doctors from child health services centres visit municipal childcare centres in order to adapt care for children who are disabled or who require personalised care plans (PAI). School social work and school health service resources in the Capital are greatly superior to those of the country in general. There is one school social worker for every 1,000 pupils and one doctor for every 3,200 students, compared to an average of one for 8,800 in France.

Their missions are most importantly to carry out systematic hearing, vision, and dental checks for 5-6 year olds, and to screen for learning difficulties. The second mission is to support inclusive education for pupils with chronic illness or disabled pupils. The school social work service also contributes to preventative measures and the fight against leaning difficulties and dropping out of school.

PARIS HEALTH SUCCESS (PARIS SANTÉ RÉUSSITE) EXPERIMENT OBTAINS POSITIVE RESULTS

In Paris, as in the rest of France, it can be observed that a great number of children have difficulties learning due to a lack of reading skills. Paris Health Success (Paris Santé Réussite) is an experimental programme to combat learning difficulties, carried out between 2011 and 2014. Its goal was to fight against the inequality of opportunities from which disadvantaged populations suffer, by providing help for children with the greatest reading problems. The plan offered a calibrated response according to the severity of problems observed in children. Initial results are satisfactory and could lead to support for this measure.

PARIS HEALTH NUTRITION (PARIS SANTÉ NUTRITION) PROGRAMME WIDENS ITS FIELD OF ACTION

Launched in 2009, this prevention programme's goals are to raise awareness of nutritional risks, as well as to prevent and treat excess weight and obesity in Parisians.

The Youth and Sports Directorate has just created physical activity courses specifically adapted for overweight adolescents or adults readapting to physical activity after long periods of illness.



Children activities. © E. Plage

FACILITATE EVERYDAY LIFE FOR DISABLED PARISIANS

In order to ensure all Parisians access to City services near their homes and throughout their communities, the City has decided upon a vast works program over 9 years to make 1,800 public facilities fully accessible. The Municipality has just registered 9 Accessibility Programmes (Ad'AP) with the State. The programme is divided into different themes: early childhood care, education, citizen services and administration, culture, sport leisure and green spaces, religion, commerce and other.

This plan defines actions for disabled people in order to facilitate their everyday lives, while encouraging their autonomy and complete civic involvement. Access to city childcare centres for disabled children is clearly improving as can be seen by the doubling of available places between 2012 and 2015. Each individual must be able to choose his or her living situation whether it is at home or in a facility, through close collaboration with <u>the Departmental Centre for</u> <u>Disabled Persons (MDPH75)</u>, medical and social facilities and professional care providers.

THE DEPARTMENTAL CENTRE FOR DISABLED PERSONS (MDPH75) IS INCREASING ITS EFFORTS FOR ACCESS TO RIGHTS, INFORMATION AND ORIENTATION

This centre is a reception and information centre for all disabled Parisians, child or adult. This one-stop shop processes requests for services (home help, school services, finding work) and provides guidance in finding services and specialised facilities. Several new efforts were begun in 2014, such as the creation of a commission dedicated to monitoring situations considered as "critical", in particular because of the complexity of the care that is required.

PARIS IS COMMITTED TO THE NATIONAL "EMPLOYMENT POTENTIAL" PROJECT ("POTENTIEL EMPLOI")

Its goal is to improve employability assessments for the disabled. The Departmental Centre for Disabled Persons (MDPH75) has chosen to focus on people with mental health problems. Services began in 2015.

PARIS CONTINUES ADAPTING ITS PUBLIC SPACES

Along with its plan to improve overall services, the City is continuing its efforts in adapting public spaces for disabled people. This can be seen in the "crossing mat" experiment to help visually impaired people cross at crosswalks. This step, planned for 2015, is completed by the modernisation of 1,800 "sound lights".



Crossing mat experiment. © Mairie de Paris - DVD

ADAPTING SOCIAL ACCOMMODATIONS FOR THE NEEDS OF DISABLED PEOPLE

Municipal efforts to encourage social autonomy for disabled people or those of reduced mobility aim to make it easier for tenants to obtain social housing adapted to their needs. They also strive to help people remain in their homes by carrying out renovations for accessibility and to adapt to needs of the disabled.

Out of the 222,353 social accommodation units in Paris in 2014 belonging to 17 social housing operators, 25 % were accessible from the street to the door and 3,636 units (1.6%) are suitable for disabled people or those of reduced mobility. The departmental plan for autonomy and civic involvement for disabled Parisians for the 2012-2016 period has planned on establishing a goal agreement, which includes a quantified commitment to meet the goal set by Paris's Local Housing Plan: 40% of social housing units must be accessible for the disabled and 3% of social housing units must be adapted for the disabled by 2020.

RIVP, Paris Habitat, SIEMP and Élogie have signed or are in the process of signing a goals agreement. The number of accessible housing units would go from 35,000 to over 70,000 while the number of housing units adapted for the disabled would reach 6,000.



Caregiver in a social accommodation unit. © J.-B. Gurliat

209 SPECIALIZED HOUSING UNITS HAVE BEEN FUNDED

This social housing is put in place for severely disabled people. These social housing units benefit from home automation systems.

PARIS SUPPORTS SIMILAR STEPS BEING CARRIED OUT IN THE PRIVATE SECTOR

The private operator PACT Paris - Hauts de Seine - Val d'Oise, with support from the City through a general agreement, is responsible for carrying out several missions.

- Partnerships with professional organisations and communication about the assistance plan developed by the National Housing Agency (ANAH) and other financial backers.
- Support and follow-up for people in their renovations projects and putting together the file to apply for project funding.

Between 2007 and 2014, 2,682 housing units were renovated to provide accessibility or make them suitable for disabled people with a total cost of \notin 4.3 million. The cost of this renovation work was subsidised in part by the ANAH in the amount of \notin 2.47 million and by the City of Paris in the amount of \notin 207,000.

THE CITY IMPLEMENTS AN EQUAL OPPORTUNITY POLICY WITH A WIDE SCOPE

In 2014 the City continued its efforts with the integration of 130 new disabled local government workers. In 2015 the third three-year agreement with the Fund for the Integration of Disabled Persons in Public Service Jobs (FIPHFP) was signed, with an overall budget of \ge 10 million over 3 years. An even more ambitious integration policy can therefore be considered.

APPLYING THE GERONTOLOGY PLAN

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The departmental policy regarding elderly people aims to prevent dependency and facilitate everyday life for elderly Parisians at home or in institutions. Paris plays a central role in the Gerontology Plan in periods of crisis, particularly through the Heat Wave Plan. The City handles benefits management (Personalised Benefit for Autonomy at home or in institutions) and welfare aid payments, rate-setting for services, and supervision of institutions and services (home help, daytime care). It authorises the creation of medical-social organisations, association projects, and directs the network of Local Information and Coordination Centres dedicated to elderly people.

SUPPORT WHICH MEETS THE SPECIFIC NEEDS OF DIVERSE ELDERLY POPULATIONS

Recent goals of this term of office have included providing support specifically tailored to the variety of circumstances of elderly people. This includes renovating institutions based on the needs of particular groups of people, including dependent elderly people, early-onset Alzheimer patients, and aging disabled people. The second component concerns improving living conditions at home through the support of caregivers, as well as developing alternative solutions to institutional care (daytime care, temporary stays). The final step involves improving coordination between all providers of medical and social services.



A NEW REQUEST FOR INNOVATIVE PROPOSALS TO PROMOTE AUTONOMY IN ELDERLY PEOPLE

In partnership with "Paris &CO", Paris is directing a request for proposals, "**EXAPAD**", in order to test innovative solutions. The goal is to identify, test and assess innovative solutions promoting autonomy in elderly people, with the help of volunteers in their homes or in institutions. This operation is organised over 5 years, from 2011 to 2016, in successive one-year stages, with three to seven professional projects being selected a year. The results of these tests can serve as a guide for elderly people and their friends and family in the rapidly growing gerontechnology market.

SOCIAL HOUSING IS BEING ADAPTED TO MEET THE NEEDS OF ELDERLY PEOPLE

The Gerontology Plan's priority is to provide elderly people with accessible housing adapted to their needs so they can grow old at home safely. A major targeted communication strategy was carried out, boosted by awareness-raising workshops for seniors about preventative steps for adapting social housing.



The generational Centre (4th). © Elogie

FOCUS

THE GENERATIONAL CENTRE: A GREAT EXAMPLE OF INTERGENERATIONAL COHABITATION

Since February 2014, 47 young workers and 50 retired people have been living in a converted office building known as The Generational Center ("Maison des générations"), on Quai des Célestins (4th). This establishment relieves the problem of isolation while creating intergenerational ties and fostering peaceful coexistence.

The home for the elderly is managed by the COALLIA association and the residence for young workers by the ALT. Different facilities and activities are available to both groups, particularly cultural and sports outings.

A NEW OUTREACH ORGANISATION TO FACILITATE ACCESS TO RIGHTS

The new outreach organisation provides better visibility of services for the most disadvantaged. It also gives municipal teams the possibility of adapting their support to ensure access to water and energy for these people.

This reorganisation is based on simplifying steps for beneficiaries and grouping resources together in a limited number of sites. These sites have social workers, administrative and Pole Emploi (job centre) personnel. Additionally, local social coordinators carry out social assessments in order to identify problems better and provide the most suitable solutions for residents' needs.

Paris's social services handle the examination of applications for working tax credits (RSA), support for beneficiaries, and establishing contracts. This national measure is intended for people without income or very little income. In exchange for this benefit, each person signs a contract, committing to seeking employment and accepting support throughout their process of joining the workforce. In Paris, the plan increased from 2013 to 2014, linked to the rise in the number of beneficiaries (+3.5%). There were a total of 67,292 beneficiaries as of 31 December 2014, with total payments amounting to €337 million.

SPECIFIC AID PLANS ARE ALSO BEING STRENGTHENED

Paris offers a "Paris Energy Families" social service whose goal is to combat fuel poverty. This service helps households that have problems paying or cannot pay their fuel costs. Through this plan, energy suppliers are paid directly by Parisian social services. A supplementary measure is the organisation of information meetings for the households in question, aiming to increase awareness of eco-friendly measures and effective financial management of energy consumption.



"NEW HOUSING UNITY" ("SOLIDARITÉS NOUVELLES POUR LE LOGEMENT")

This is an association participates to the Territory Project. It brings together citizens who are involved in their arrondissements in order to provide housing for the neediest members of the community. They collect funds and acquire housing for people in need, giving them the necessary time to get back on their feet and find other sustainable, independent solutions.

Ensuring access to water for everyone is also a priority of the City. Its services will soon be testing plans made possible by the Brottes Law of 15 April 2013. Its various provisions on water pricing, preventive assistance and establishing a progressive pricing plan. Paris also has a large public drinkable water program which includes nearly 1,500 freely-accessed drinking fountains on public streets and gardens. During the winter period about 40 of these fountains are kept in service.

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HOUSING SUPPLY IS IMPROVING

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The City of Paris is continuing its efforts to improve housing options available to Parisians, while also encouraging social diversity in housing. This policy aims to increase the social housing supply, create family housing and housing specifically adapted for different groups of people, while respecting the goals set forth in the Climate and Energy Plan.

The goals for producing new housing are ambitious: 10,000 housing units a year, 7,500 of which will be social housing units. More than 46,000 social housing units have already been funded.

The Paris local authority's plan for making private housing available revolves around three different measures to provide housing for specific populations at rent that is below real estate market prices in exchange for certain advantages, particularly of a financial nature, for the owners.

The City of Paris has decided to improve the allocation process for social housing by introducing a new method for pricing, taking into account particularly serious events for people or their assets. This project is completed by the creation of a **LOC'annonces ads platform**. Launched in April 2015, this new online service provides detailed information about housing (surface area, photos, location and price) and allows people to apply directly for housing online. It will be developed progressively until 2016.

The second programme: **United Risk-Free Renting** (Louez-Solidaire et Sans risque) provides temporary housing for those in difficulty through intervention by authorised organisations. It provides an alternative to emergency hotel housing. Authorised organisations act as tenants of private dwellings and temporarily house people in need in these dwellings. Created in 2007, this programme should be able to count on 2,000 dwellings from now until the end of the term of office. By 30 June 2015 it had already secured 1,085 private housing units and had been of benefit to 2,044 households.

The **MULTILOC'** plan, created in March 2015, is intended for households with very low income. The goal of this measure is to bring dwellings which have long been vacant back onto the rental market. Owners who entrust management of their property to a real estate agent have partnered with the City and benefit from financial assistance to carry out thermal renovation work and decoration. The City also subsidises some twenty associations that manage residences for young workers. These organisations provide both temporary housing solutions and support for social and professional integration of young people.

In the private housing sector, a new municipal regulation has been established to keep in check the transformation of housing units into short-term tourist rentals. This measure for maintaining housing supply came into effect on 1st January 2015 and requires owners to file an authorisation prior to the change of use. Additionally, they must offer creation of a new housing unit in the same arrondissement as the converted one.

Housing must also ensure the best living conditions for occupants. For this reason the City's housing technical service is proceeding with 4,100 health and sanitary surveys. They evaluate people's health or safety risks. 1,000 to 1,200 formal notices to carry out work in order to resolve breaches have been served to owners.



Social housing, rue Doudeauville (18th), © F. Malzieu, RIVP

PROMOTING SOCIAL AND OCCUPATIONAL INTEGRATION THROUGH THE SOCIAL AND SOLIDARITY ECONOMY (ESS)

As part of the social solidarity economy, Organisations for Integration through Economic Activity provide supplementary support for people who are the furthest removed from the world of work to facilitate their occupational integration. Organisations which can hire these people include integration enterprises, intermediary associations, temporary work integration organisations, public corporations in the neighbourhood, and integration workshops or construction sites. The Paris Department financially supports recruitment of Parisian beneficiaries of working tax credits (RSA). Throughout 2014, 92 organisations successfully recruited 6,289 people, 1,899 of whom were beneficiaries of working tax credits (RSA).

THE CITY SUPPORTS SOCIAL ENTREPRENEURSHIP AND FINANCIAL SOLIDARITY

In order to facilitate the development of business and employment opportunities in the territory, the City of Paris provides financing for several organisations specialised in closely supporting people who initiate social solidarity economy projects. These organisations include: business incubators, business and employment cooperatives, etc. The City is also committed to helping organisations specialised in microfinancing support social entrepreneurs' projects financially.



Social and solidarity trophies ceremony. © S. Robichon

THE LOCAL AUTHORITY REWARDS INNOVATIVE PARISIAN PROJECTS OF GREAT POTENTIAL WITH SOCIAL AND SOLIDARITY ECONOMY TROPHIES (TROPHÉES DE L'ÉCONOMIE SOCIALE ET SOLIDAIRE)

Since the beginning of the project in 2009, 275 project initiators have demonstrated their commitment to the Social Solidarity Economy. Various forms of support have been granted to the projects honoured, such as \notin 5,000 or \notin 25,000 subsidies, support for finding premises, partnership development consulting, assistance in understanding call for tender procedures. In 2014, eight projects were rewarded.

A NEW "LUTESS" REAL ESTATE CENTRE WAS CREATED FOR SOCIAL SOLIDARITY ECONOMY ORGANISATIONS (ESS)

Situated in the East of Paris, at 204 Rue de Crimée (19th), this 2,400 m² collaborative space is home to 16 businesses, associations, cooperatives and mutual companies involved in this sector.

THE CITY IS REWARDED FOR ITS SUPPORT OF PARTICIPANTS IN FAIR TRADE

For the third consecutive time, the City has been awarded the title of Fair Trade Territory in 2014 (Territoire de commerce équitable). This title rewards the Municipality's decision to support steps to raise Parisians' awareness about this mode of responsible consumption, as well as developing the fair trade offering. In May 2014 the local authority supported the organisation of 15 Days of Fair Trade (Quinzaine du Commerce Équitable), during which numerous events aimed at raising general public awareness about fair trade were organised.

PROMOTING GENDER EQUALITY, SOCIAL AND OCCUPATIONAL INTEGRATION WITHIN THE PARISIAN CIVIL SERVICE IS ONE OF THE TERM'S PRIORITIES

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THE CITY IS COMMITTED TO PROMOTING GENDER EQUALITY

The Parisian local authority is aware of its duty to serve as an exemplary employer and has therefore continued to develop its policy for equality in the workplace in 2014. Since 2010 an indicator reference document, designed around these goals, has been used to measure progress.

As for wages, pay gaps within the Parisian local authority are clearly less than those observed in the State civil service or in the private sector. Measures on recruitment and internal promotion led to a significant rise in the percentage of women working in some of the most male professions over the last 9 years. For example, at the end of 2014, in technical services 33.5% of the engineers were women, compared to 22.8% in 2005. An analysis of promotions which took place in 2013 and 2014 revealed very balanced gender distribution: 50.5% women and 49.5% men.

THE CITY IS RENEWING ITS COMMITMENT TO OCCUPATIONAL INTEGRATION

The City of Paris's active policy for providing professional support for Parisians, especially for the least skilled young people, relies on State-subsidised contracts, apprenticeships and internships.

Complying with its commitment to equal opportunity and solidarity, Paris welcomed 1,378 people on State-subsidised contracts in 2014. State-subsidised contracts were for unemployed young people aged 16 -25 and included a training component. 420 young apprentices were taken on in order to learn one of the City's 320 professions, in particular, technical professions. This programme is based on alternance training combining theoretical lessons in training centres and professional learning with the employer. Finally, nearly 6,000 interns were granted internship agreements.

THE CITY IS RENEWING AND EXPANDING INTERNAL OPPORTUNITIES FOR PROFESSIONAL TRAINING

Many innovative training programs are now available for the City's public employees: Eco-friendly behaviour, eco-friendly office practices, development of a policy for responsible purchasing, and new modes of population involvement (dialogue). In 2014 and 2015, dedicated training for managers, particularly in terms of "Generational Management" and "Diversity Management" were in strong demand.

THE CITY IS PROVIDING ITS WORKERS WITH BETTER SOCIAL SECURITY AND ACCESS TO HOUSING

Social security benefits aim to preserve workers' health, support families and help the most vulnerable. In 2014, social security benefits paid to Parisian local authority workers and by the Association for Paris Civil Service Personnel Welfare (AGOSPAP) totalled over €23.9 million. The Health Allowance (APS), which plays a major role in helping public workers obtain complementary health coverage, represents 62% of the total amount of benefits.

THE CITY IS FACILITATING HOUSING ACCESS FOR SOME OF ITS WORKERS

This effort fulfils several human resource policy objectives: combating poor housing conditions (overcrowding), limiting absenteeism and making it easier for workers who benefited from accommodation with their job to find housing upon retirement. Since 2004, it has been possible to reserve one sixth of social housing for Paris local authority personnel. Special attention is granted to workers with disadvantaged or unstable social situations.

THE CITY IS FURTHER DEVELOPING ITS INSTITUTIONAL CATERING POLICY

Renovations continue in order to meet workers' expectations. More than 1.8 million meals were served in 2014 in restaurants of the ASPP (Social Association for City And Departmental Personnel of Paris), a partner in the sustainable food plan. To cover all geographical locations, agreements were signed with shared company canteens. In 2014, 200,000 meals were served in canteens with these agreements in place.

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THE LOCAL AUTHORITY IS DEDICATED TO THE MOST VULNERABLE NEIGHBOURHOODS

Paris's policy for employment and professional integration is accompanied by specific measures for disadvantaged groups in neighbourhoods, according to the City Policy. It is based on policies involving both the municipal and departmental authorities in Paris.

The **Urban Contract for Social Cohesion** (CUCS) provides the reference contractual framework for city policy. Developed with State and City of Paris services, it follows Paris's general program for disadvantaged neighbourhoods and serves as a reminder about important choices concerning housing, transport, urban renovation and social policy in order to support the 14 "City Policy" neighbourhoods which represent 330,000 residents.

THE "EMPLOYMENT AND ECONOMIC DEVELOPMENT" SECTION OF THE URBAN CONTRACT FOR SOCIAL COHESION PROMOTES EMPLOYMENT FOR THE MOST VULNERABLE RESIDENTS

This section consists of a series of financial measures promoting both employment for the most vulnerable residents and economic development: priority recruiting, calling on integration organisations, integration construction sites, increasing language training, and developing the solidarity economy.



Intervention in sensitive neighbourhoods. © Mairie de Paris

CIRCULAR ECONOMY IN PARIS



PARIS

2,750 TONNES* of textiles reused and recycled



6,000 TONNES* of recovered materials and 7500 tonnes* of parving stones reused to repair roads





Some **6 MILLION*** earthworms working to turn Parisian food waste into compost



15 TONNES* of fruit and vegetables diverted from landfill sites



72,731 TONNES* of cardboard, paper, plastic bottles, and 66,889 TONNES* of glass recycled

Launch of the General Assembly on the Circular Economy of Greater Paris, March 11th 2015

© Mairie de Paris

PROMOTING RESPONSIBLE METHODS OF PRODUCTION AND CONSUMPTION AND SUSTAINING THE CIRCULAR ECONOMY

ities must invent solutions allowing the transition from a throw-away to a sustainable society. Responsible production and consumption methods will be encouraged to support the development of a circular economy.

The City of Paris is particularly committed in this area: 27.3% of the meals served in municipal canteens meet sustainability criteria (certification, local and seasonal produce). The Municipality also has an effective waste prevention policy, has started a composting programme which already benefits 10,000 Parisians, has supported the creation of nine waste sorting and recycling centres, annually lays 15,000 tons of granite from its internal construction waste recycling facility, has already collected 2,750 tons of textiles, etc.

The Mayor of Paris is now applying this ambition across Greater Paris. In conjunction with her partners, she intends to turn the conurbation into a pioneer city, converting its economy into a virtuous model which is environmentally-friendly and creates employment which is not vulnerable to relocation. With this purpose in mind, Paris launched the Greater Paris General Assembly on the Circular Economy, in March 2015 at the City Hall. This aimed to identify all the initiatives and to develop new solutions, both for methods of production and consumption and for the distribution of goods and services.

PARIS IS MOVING TOWARDS ZERO WASTE

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The "waste" strategy of Paris City Hall is applied to two of the pillars of the circular economy which are waste prevention (reduction and reuse) and recycling. The 2014 results show the progress made.

In terms of prevention, Paris City Hall collected 19,000 tons less household and similar waste than in 2013. Thus, the aim of the Local Waste Prevention Programme to reduce waste by 7% by 2015, was almost reached in 2014. Paris City Hall also maintained its initiatives to step up recycling of household packaging waste and large items with the start of a new rubble and home waste treatment facility. Sorting of recyclable waste thus increased by 11% relative to 2013, i.e. 17,000 tons.

These efforts for the prevention and recycling of waste result at the treatment end in a significant reduction in the quantities of waste landfilled (-25%) and incinerated (-0.7%).

Paris City Hall is committed to a "zero waste" trajectory. The aim is to gradually move towards waste management which no longer uses landfill and which limits energy recovery through incineration of nonrecyclable waste. New initiatives are planned in this regard: renewal of the Local Waste Prevention Programme, an action plan to improve sorting of household packaging waste, general application of new collection methods for uncommon or large items and general application of collection of organic waste from local residents.





THE CITY IS ROLLING OUT AN INNOVATIVE WASTE COLLECTION INFORMATION AND ANALYSIS SYSTEM

The local authority provides door-to-door collection at different frequencies depending on the waste (weekly collection for household waste, weekly glass collection, etc.). To tailor this service to the needs of users, the City is developing a computerised instrument which identifies bins collected every day using an electronic chip. This instrument enables optimisation of the collection service. It is being introduced gradually from autumn 2015.



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"Co-recyclage" is a platform for the general public, free of charge, which enables a second life to be given to unused items and / or collection of useful and free items.

"En poussette Simone" is an online sales site which facilitates the reuse of second-hand articles for children, 50% of the sale price is returned to the seller.

<u>Moulinot</u> (compost and biogas) is a company giving training in the sorting and collection of organic waste, to obtain energy in the form of biogas.

PARIS CITY HALL IS MAINTAINING ITS WASTE PREVENTION INITIATIVES

> The local authority is working with professional organisations to inform residents about the actions they can take and to support volunteer bodies in their attempts at well-meaning initiatives. Partnerships are also being forged with companies wishing to take part in a pilot waste prevention programme. Thirteen "committed companies" have been or are being supported in sectors as varied as the hotel industry, restaurant and catering services, aviation and tertiary industry. These initiatives enable them to orientate their purchasing towards ecologically-designed or recyclable products. Best practice factsheets will be widely distributed, to disseminate these initiatives to as many people as possible.

REUSE IS BEING EXTENDED TO NEW "WASTE"

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As a second stage after reduction, reuse consists in avoiding throwing away an item (or food), by putting it back into the consumption circuit, either for use a originally intended or for use in an alternative way.

SIGNIFICANT POTENTIAL FOR REDISTRIBUTION OF FOOD PRODUCTS STILL FIT FOR CONSUMPTION

This is why, in addition to raising awareness about **reduction of food** wastage, Paris City Hall is supporting community projects aimed at organising this redistribution between producers and people in need of food aid. As an example, the La tente des glaneurs association collects and redistributes items unsold by traders at the Joinville food market (19th arr.). The local authority provides logistical and organisational support to the association. Nearly 400kg of fruit and vegetables are redistributed every Sunday to disadvantaged persons. This should be implemented as a general measure in the other markets.



Composting in a courtyard. © Mairie de Paris

COMPOSTING ENABLES REUSE OF ORGANIC HOUSEHOLD WASTE

This is one of the most effective initiatives to reduce the weight of bins and is used at either individual or community level. Paris City Hall is encouraging community composting in all its forms by supporting under-building household composting for a whole district. This project was chosen by Parisians as part of the 2014 participatory budget.

35 TONS OF ELECTRIC AND ELECTRONIC ITEMS WERE REUSED IN 2014

Ecosystème is one of the two eco-organisations responsible for the recovery of Waste from Electrical and Electronic Equipment (WEEE). It has several collection points in the Paris area, in addition to the local authority service. Together with the Emmaüs Défi recycling centre, it also organises a "solidarity" WEEE and other small item collection service in five arrondissements (9th, 10th, 11th, 16th, 17th). Nearly 7.8 tons of items collected by the recycling centre in 2014 have been reused.

2,895 TONS OF TEXTILES, FABRICS AND SHOES WERE COLLECTED IN 2014

Three operators authorised by Paris City Hall have set up 242 containers. The textiles are mainly sold for reuse as cleaning cloths (60%), or recycled for example as insulation (35%). This activity contributes to reduction of the weight of bins which contained 43% less textiles in 2013 than in 2011.



THE PARIS LOCAL AUTHORITY IS IMPROVING ITS PROCEDURES FOR REUSE

For example, wood from old benches in public areas is being reconditioned in carpentry workshops. 1,000 benches are restored every year, 2/3 of these with recycled wood. A similar approach is being used for the recovery and reuse of wooden gates, pavements and curbs. In addition, to facilitate the exchange of furniture between services and officials, Paris City Hall has set up a furniture trading forum on a collaborative platform which can be consulted by all officials on the Paris local authority intranet.

RECYCLING NETWORKS ARE BEING DEVELOPED IN THE CITY

The third stage of the waste strategy, recycling, is a means of re-using raw materials. There are recycling facilities for several types of waste:

- selective waste collection: paper and cardboard, household packaging,
- occasional large waste items collected in a recycling centre, on appointment or in the collection points of environmental organisations: batteries, lamps, furniture, rubble, scrap metal, etc.

In total, sorting of recyclable waste increased by 11% between 2014 and 2013.

THE EIGHT PARIS RECYCLING CENTRES COLLECTED MORE THAN 2,400 TONS OF ITEMS IN 2014

Recycling centres contribute actively to the reuse of waste through the collection and reuse of particular items. They repair and resell these items and raise awareness about reuse among residents and young schoolchildren. These local actors also provide services to citizens by organising fun neighbourhood events, creating social links and often providing community reintegration for certain categories of people through employment. The eight Paris recycling centres collected more than 2,400 tons of items in 2014, 50% more than in 2013. Nearly 61% of these items were reused or recycled.

The aim of the local authority is to maintain and sustain development of this economic activity.



NGO Ma ressourcerie (13th). © Mairie de Paris

SORTING OF OCCASIONAL OR LARGE ITEMS IS ALSO AN IMPORTANT ISSUE

This increased in 2014, partly due to the improvement of sorting in Recovery and Large Item Disposal Centres and the setting up of new facilities for home furnishings waste and for rubble. To include the City of Paris initiative in a wider framework called the Master Plan for Local Waste, the Atelier Parisien d'Urbanisme (APUR) was commissioned to draw up an inventory and propose locations for different reuse and recycling facilities.

Education and information initiatives suggesting the correct behaviour to adopt in terms of sorting are essential. These are particularly being carried out in schools and leisure centres, and in French Foyers de Jeunes Travailleurs (social housing for young adults). Other operations may also serve to increase the awareness of individuals, such as those relating to composting in buildings, second-hand toy sales or collection of clothing to give to associations.

Alongside these campaigns, the City has set up waste sorting in 663 nursery and infant schools in Paris. In October 2014, the City opened a market for equipment assembly and repair services, among others for large games and toys and childcare equipment.

ORGANIC WASTE REPRESENTS THE THIRD SOURCE OF HOUSEHOLD WASTE IN VOLUME

This is waste of vegetable or animal origin and comes from kitchens, gardens or green areas. Consisting mostly of water, organic waste accounts for the majority of the weight of an average household bin. Processing organic waste separately to other residual household waste enables extraction of renewable energy by anaerobic digestion and production of highquality compost which is then reused in agriculture.

In 2014, to comply with regulatory obligation following the Grenelle Laws, Paris City Hall introduced sorting and separate weekly collection of organic waste from two food markets - Joinville (19th arr.) and Ornano (18th arr.). This collection will gradually be extended to the majority of markets.



THE CITY IS STARTING TO COLLECT ORGANIC WASTE

The City Hall administrative restaurant is the first local authority establishment where organic waste has been collected since the start of 2015. This should reduce waste, enable treatment of organic waste by selective collection and enhance energy production with anaerobic digestion rather than incineration, also reducing the cost of treatment and the carbon footprint. This innovation will be further developed in 2015 in the City's other large establishments.

LARGE ITEM WASTE DISPOSAL CENTRES ARE COMMITTED TO A HIGH-QUALITY APPROACH

In addition to providing support right outside the building, appointment possible 7 days a week, Parisians have access to seven recycling and large item disposal centres (CVAE) in the city and two waste disposal areas which take large items.



Recycling and large item disposal centre, Porte des Lilas (20th). © Mairie de Paris

ECO POINTS MOBILES WILL SERVE THE WHOLE PARIS AREA

The Trier ses déchets au plus près project was among the winning projects submitted for voting on by Parisians as part of the 2014 participatory budget. Eco Point Mobile is a mobile device intended to provide information on environmentally-friendly actions for waste reduction, reuse and directions to the different collection points available. It is also a voluntary collection point for the selective disposal of certain waste.

THE CHRISTMAS TREE COLLECTION HAS ACHIEVED A NEW RECORD

This operation meets two objectives: to encourage Parisians not to dispose of their Christmas tree on public roads or in the Bois de Boulogne and Bois de Vincennes, and to re-use green waste. The Christmas trees are shredded for use as wood chippings in green areas and woods. In winter 2014-2015, 54,000 trees were deposited at the 93 collection points and more than 870 m³ of wood chippings produced.

PARIS CITY HALL IS DEVELOPING A SOCIALLY AND ECOLOGICALLY-RESPONSIBLE PUBLIC PROCUREMENT SCHEME

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The Paris local authority has for many years been conducting an active socially and environmentally responsible procurement policy. In 2014, 278 procurement contracts included social insertion and environmental clauses, and 330 incorporated environmental clauses and criteria, which was over 50% of all notified contracts. 98% of work contracts included an environmental clause or criteria as a minimum.

The Social and Solidarity Act of 31 July established an obligation to set up a scheme for promoting socially and environmentally-responsible public procurement for public entities with total annual purchasing above €100 million excluding VAT. Paris plans to adopt a city-wide scheme, currently in draft form, which will identify the main work and assessment areas which have already been set up or are to be studied.

Among the most used clauses and criteria in 2014 were: clauses on eco-certification, the "clean delivery" clause which requires contractors to use vehicles with a recent Euro standard, the "order optimisation" and "eco-packaging" clauses. The "clean worksite" clause is designed to reduce all types of contamination on worksites and is the most common clause in work contracts. The new objective of this term of office on the circular economy has already been taken into consideration in many City contracts.



18% OF CLOTHING PROVISIONS FOR CITY OF PARIS STAFF ARE MADE FROM FAIRTRADE COTTON

The City of Paris dresses cleaning staff in professional clothing made from Fairtrade cotton with the Fairtrade-Max Havelaar label.

SOCIAL INSERTION THROUGH PUBLIC PROCUREMENT FOSTERS JOB OPPORTUNITIES FOR PEOPLE WHO ARE OFTEN EXCLUDED FROM THE WORKFORCE

With strong political support, this approach is part of the thinking and strategies of buyers and operational Directorates. In 2014, 314 Paris contracts included a social insertion clause, 278 of which for the Paris local authority alone. These clauses led to the equivalent of 345 people in total working full-time. Meanwhile, the local authority continued its efforts for the protected worker sector which favours recruitment of people with disabilities. Direct procurement or through "reserved" contracts accounted for approximately \notin 2 million in 2014.

THE "DIVERSITY" CLAUSE IN SERVICE AND WORK CONTRACTS

A study conducted on 31 December 2014 on behalf of the City, reveals a slight increase in the proportion of companies engaged in a progress-oriented approach to diversity (52% in 2014 compared to 50% in 2012). Members of the public targeted by initiatives in 2014 were young people followed by older people and then people with disabilities.

PARIS IS DEVELOPING A SUSTAINABLE FOOD SYSTEM

As part of its responsible purchasing policy, since 2009 the City of Paris has undertaken an ambitious action program to introduce sustainable food in their canteens. It is also against food wastage and encourages the development of more environmentally-friendly agricultural practices.

RENEWED SUCCESS FOR THE SUSTAINABLE FOOD PLAN IN THE CITY'S CANTEENS

The City canteens serve nearly 30 million meals a year. The proportion of sustainable food has exceeded 30% in schools in over half of Parisian arrondissements and is 50.3% in nurseries. Paris is also the leading French public purchaser of organic farming products.

BOOSTED BY THESE RESULTS, PARIS HAS SET AN AMBITIOUS TARGET OF 50% SUSTAINABLE FOOD IN ALL OF ITS CANTEENS BY 2020

This target is linked to three benchmarks (the introduction of organic farming products, use of local and seasonal products and products with "Label Rouge", Marine Stewardship Council and Sustainable Fishing certification).



New Sustainable Food Plan. © Mairie de Paris

The **new Sustainable Food Plan 2015-2020** was drawn up with contributions from 150 participants including catering managers, parents of school pupils, Town Halls in arrondissements, public institutions and representatives from agricultural industries and associations. The Plan is structured around three main areas:

- consolidating and structuring demands on municipal canteens,
- bringing together actions to assist local sustainable industries to structure themselves so as to meet needs,
- adaptation of all discussion and communication mechanisms and training initiatives.

FOOD WASTAGE IS ONE OF THE MAIN THEMES OF WASTE REDUCTION

Food waste, a proportion of which is thrown away still packaged, represents around 16% of household waste. In 2014 initiatives to combat food wastage were made a priority and increased significantly, with an impact on several communities: consumers in shops, food markets or during celebratory events and school staff and children. In the latter, these initiatives prevented wastage of 6.5 tons of food waste.

Reducing food wastage is also linked to the concerns of the circular economy. Thus, the Agence Nouvelle des Solidarités Actives and the City of Paris in 2014 initiated a network of stakeholders involved in efforts to combat food wastage. Around 40 such stakeholders offered contributions on the theme of redistribution of unsold food, for inclusion in the White Paper of the General Assembly on the Circular Economy.

EAU DE PARIS AND THE CITY OF PARIS ARE ENCOURAGING THE DEVELOPMENT OF ORGANIC AGRICULTURE AS PART OF THE SUSTAINABLE FOOD PLAN

These actions take place in the catchment areas which supply Paris, where it is essential to protect drinking water resources. Land acquisition in catchment areas and financial support for the structuring of organic agriculture sectors are the two main components. Since 2010, Eau de Paris has acquired 153 hectares of agricultural land for this purpose on rural leases. For example in 2013, springs in the Vanne Valley which are tapped by Eau de Paris became a "national organic agriculture pilot site" as part of a procedure entered into with the French National Federation of Organic Agriculture.



PARIS HAS SIGNED THE INTERNATIONAL URBAN FOOD POLICY PACT

On the occasion of the World Expo with the theme **"Feeding the Planet, Energy for Life"**, held in Milan in 2015, 111 local authorities from around the world, including Paris, declared that food was a major concern for cities and that they had a crucial role to play in actions and the coordination of actions in this area. The Food and Agriculture Organisation of the United Nations, the European Union and the group of 40 major cities committed to tackling climate change (C40) have in particular supported this initiative. This pact, the Urban Food Policy Pact, revolves around seven major action themes including: developing sustainable food systems, integrating this component in all municipal policies and coordinating actions in the city.

Signature of this marks the start of cooperation between the signatory cities, encouraging implementation of the recommendations made. It also includes a best practice guide that lists Paris' key actions.



"La récolte" is an online sales site which facilitates the reuse of second-hand articles for children, 50% of the sale price is returned to the seller.



Recycled stuff animals. © Mairie de Paris

PARIS WILL PROPOSE A CHARTER OF ENVIRONMENTALLY-RESPONSIBLE EVENTS

The City organises, is involved in or supports numerous demonstrations and events whether these be cultural, sports, celebratory, social, economic, etc. It would like to become exemplary in the choice of services selected by itself or its partners to ensure a reduced environmental footprint.

With this goal in mind, the local authority wishes especially to encourage the development of practices with less impact on the environment and climate for events. To achieve this, it is involving the largest possible number of actors in its approach, especially designers and event and demonstration organisers in the Paris area. The city also hopes that environmentally-friendly communications can be developed to raise awareness of these events, amongst the public and all actors involved with environmental issues.

BETWEEN 10 JUNE AND 10 JULY 2016, PARIS WILL HOST THE 2016 EDITION OF THE EUROPEAN FOOTBALL CHAMPIONSHIP: <u>EURO 2016</u>

The Parc des Princes stadium was selected as one of the ten venues. An Eiffel Tower "Fans' Zone" will be set up on the Champ de Mars, providing retransmission of the 51 official matches. Between 2 and 3 million visitors are expected throughout the event, with nearly 100,000 people per day.

The City hopes that this event, and the major international sporting events to come, will have the least possible environmental impact and will contribute fully to the social and solidarity economy of the City. For this, the City of Paris Euro2016 assignment team is committed to achieving responsible management certification for event activity: the ISO 20 121 standard.





"PARIS PLAGE"

In 2015, Paris Plages was exemplary in terms of sustainable development both in its design and daily management. Transportation of furniture and palm trees by river avoided use of 80 heavy good vehicles and the equivalent of 250 heavy good vehicles for 5,000 tons of sand. Installation of potentiometers reducing light intensity on the Pompidou road resulted in a 30% decline in street light consumption. Finally, after use the sand was made available to the Republican Guard, the city's green areas and volunteer equestrian centres.



"Paris Plage". © S. Robichon, Mairie de Paris



"Paris Plage". © D. Lesage, Mairie de Paris



"Paris Plage". © D. Lesage, Mairie de Paris

PARIS IS COMMITTED TO THE CITY'S CIRCULAR ECONOMY

According to the environment and energy management agency ADEME, the circular economy is an economic system of exchange and production which, at all stages of the product life cycle (goods and services), aims to increase the effectiveness of use of natural resources and reduce the impact on the environment.

THE WHITE PAPER OF THE GREATER PARIS CIRCULAR ECONOMY IS A DIVERSE ROADMAP

The City, together with several Île-de-France local authorities, wished to launch a dynamic common frame of reference for work on the issues of the circular economy for the metropolitan area of Greater Paris. **The General Assembly on the Circular Economy** was inaugurated on 11 March 2015. This brought together actors from all backgrounds: administrations, companies, associations, NGOs, academia, research actors, etc. Working groups were organised thereafter.

This dialogue resulted in a set of recommendations, put together in a **White Paper** structured around 65 proposals for action grouped into seven focal areas. These proposals are aimed at policy makers in the Paris metropolitan area, as well as economic actors and citizens. The White Paper is the first step in the development of the circular economy in the Paris metropolitan area.



White Paper of the Greater Paris circular economy. © Mairie de Paris

In September 2015, three days of debates, conferences, events, meetings and exhibitions in the City Hall marked the closure of the General Assembly on the Circular Economy, with 1,240 people attending, including representatives from 10 countries. This event signalled the start of a strategy to be implemented for the future metropolitan area.

On this occasion, 10 cities signed the Greater Paris Pact for the Circular Economy, through which they undertake to rapidly implement concrete actions to boost the circular economy. Actions are organised around four focal points: sharing best practices, combatting food wastage, developing urban agriculture and agriculture close to urban areas, developing waste recovery logic and creating a common ecoconstruction charter. This Charter is open to all local authorities in the area.

NUMEROUS INITIATIVES AND EXPERIMENTS BEING INITIATED OR CONDUCTED BY THE CITY ARE ALREADY UNDERWAY IN THE AREA

Energies from industrial activity, heat from waste water, waste incineration or data centres constitute a real opportunity to reduce resource consumption. For example, the City of Paris is thus committed to energy recovery from data centres, through a first experiment to heat the Butte aux Cailles swimming pool (13th arr.). This facility should provide the minimum energy needed to meet the requirements

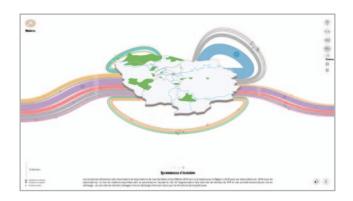
CALL FOR "IMPROVEMENT OF THE URBAN METABOLISM" PROJECTS

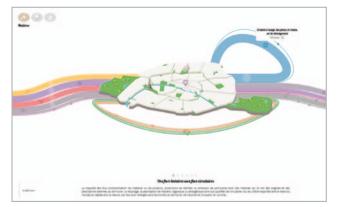
To continue actions for the mobilisation of economic actors and to fully anchor the concept of industrial and land ecology in the Paris area, the City of Paris has launched a call for projects to test innovative solutions in municipal departments. This call for "improvement of the urban metabolism" projects was used to select projects, 13 projects at the end of 2014.

Four winning projects are already underway, enabling a reduction in the waste / discharge of the Paris local authority.

- The HESUS project is a web platform linking sites producing and receiving excavated soil.
- The Co-Recyclage project is a web platform enabling City departments to give furniture and equipment to the network of associations and actors of the Social and Solidarity Economy.
- The project Love your Waste recovers organic waste from canteens.
- Veolia is working on a project to limit chemical treatments. It is being tested on a fountain in the 15th arrondissement.

In addition **interactive computer graphics** have been created. These are an aid to understanding of the notion of urban metabolism: i.e. the materials, energy and water flows which the city needs for its activities. This tool also highlights the innovative solutions implemented and which relate to industrial and local ecology.







Interactive computer graphics. © Mairie de Paris

CONCLUSION

he Sustainable Development Report again shows this year that Paris remains a true laboratory for exploration of new technological policies and solutions to counter global warming. Started 10 years ago, this innovative approach places the Capital among world leaders in this field.

Drawing on this expertise and its international recognition, Paris is now preparing for the challenges of the 21st century.

While the principles of sustainable development have shaped all major Parisian projects in recent years, Paris is now opening a new chapter, strengthening the strategies to be implemented by 2020. It is calling upon Parisians to become active players in the development of their City. Through the various calls for contributions, users submit their initiatives to the local authority and directly decide from the choice of investments. This unprecedented development in citizen participation is contributing to the creation of a remarkable dynamic in the city. This will continue throughout the term of office.

Co-development of the City's major action plans, together with civil society actors, is also becoming a general principle. This form of continuous consultation allows both enhancement of initiatives through the diversity of expertise and to guarantee the success of measures jointly determined in this way. The active involvement observed at the time of the General Assembly on the Circular Economy on the scale of the metropolitan area, perfectly confirms the need to work together with local authorities, institutions, companies, associations and users. From an international perspective, the willingness of the Mayor of Paris to promote **a city diplomacy which is open to major global challenges** has been very successful. Alongside the strengthening of links with major world cities, North and South, Paris was able to engage the main European cities in March to prepare for COP21. This work continues with its partners from the perspective of "a diplomatic solution, a participatory diplomacy", to strengthen the role of cities in the debates at the end of the year.

In December, during the COP21 negotiations, **Paris will carry the voice of cities and regions around the world.** While negotiations during the COP21 to reach a global climate agreement will be held at State level, the success of national contributions and observance of targets set by governments will also depend on the local level. For it is within and through local authorities that many concrete catalysts for action are found (transport, housing, energy, etc.).

ADAPT PARIS TO THE CHALLENGES OF THE XXIST CENTURY

REVISION AND DRAFTING OF PLANS

2020																										I		
2019	ACTION PLAN																								REMENT			
2018	NEW PARIS CLIMATE AND ENERGY ACTION PLAN									SITY PLAN				NG WATER				PARIS PLAN	SION	TION					SOCIALLY AND ECOLOGICALLY-RESPONSIBLE PUBLIC PROCUREMENT			
2017	NEW PARIS CLI	NA		N LOCAL PLAN	CTION PLAN	ENVIRONMENTAL NOISE PREVENTION PLAN				NEW BIODIVERSITY PLAN	ATURE		2	SCHEME OF USES AND NETWORK OF NON-DRINKING WATER				COMMUNITY INVOLVEMENT – URBAN ECOLOGICAL NETWORK – ASSOCIATION CENTRES – PARTICIPANTS OF THE SUSTAINABLE PARIS PLAN	PARISIAN PACT AGAINST LARGE-SCALE EXCLUSION	NEW DEPARTMENTAL PLAN FOR CHILDREN PROTECTION	DISABLED PARISIANS				ALLY-RESPONSIB	r Lan	ZERO WASTE STRATEGY REDUCTION OF FOOD WASTAGE PLAN	AND CIRCULAR ECONOMY ROADMAP
2016		NEW ADMINISTRATION TRAVEL PLAN	PLAN	UPDATED URBAN LOCAL PLAN	ATMOSPHERIC POLLUTION ACTION PLAN	MENTAL NOISE P	L HEALTH PLAN		CHARTER		GREEN AND BLUE CORRIDORS SCHEME: PATHS OF NATURE		RAINWATER PLAN	S AND NETWORK	URBAN AGRICULTURE STRATEGY			ARTICIPANTS OF T	ACT AGAINST LAR	NTAL PLAN FOR C			PLAN		SOCIALLY AND ECOLOGICALLY-	SIAINABLE FOUD	ZERO WASTE STRATEGY	ND CIRCULAR EC
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2013	PARIS CLIMATE							NEW MOBILE TEL				LOGICAL RESTOR	/ - BLUE PAPER					ECOLOGICAL NETV			LAN FOR AUTONO	AN						
2012		TRAVEL PLAN								AN		RIVER BASIN ECOLOGICAL RESTORATION SCHEME	WATER STRATEGY - BLU			ILS		LVEMENT – URBAN		N PROTECTION	DEPARTMENTAL P	GERONTOLOGY PLAN		PLAN			LOCAL WASTE	
2011	N PLAN	ADMINISTRATION TRAVEL PLAN	MENT SCHEME	••••		AN		HARTER		BIODIVERSITY PLAN						UPGRADED FORUMS - DISTRICT COUNCILS		COMMUNITY INVOI		AN FOR CHILDRE				LOCAL HOUSING PLAN		U FLAN	ROGRAM	
2010	PARIS CLIMATE ACTION PLAN	ADMINISTRATI BICYCLE DEVELOPMENT SCHEME		: URBAN LOCAL PLAN		NOISE PREVENTION PLAN		MOBILE TELEPHONE CHARTER	LOGISTICS CHARTER											DEPARTMENTAL PLAN FOR CHILDREN PROTECTION	PARIS AND SENIORS PLAN						WASTE PREVENTION PROGRAM	
	Tackle climate change and adapt the city to climate change					2	Improving the environmental				Promoting biodiversity in Paris: green and blue corridors						U Contributing to the fulfilment of others through civic involvement			Reinforcing social cohesion and solidarity between territories and between generations					Promoting	Promoting responsible methods of production and consumption and sustaining the circular economy		

Technical coordination: Direction des espaces verts et de l'environnement – Agence d'Écologie urbaine

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