



PARIS
**CIRCULAR
ECONOMY**
PLAN

1st

ROADMAP

ADOPTED AT THE PARIS CITY
COUNCIL OF 3, 4 AND 5 JULY 2017

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PARIS CIRCULAR ECONOMY PLAN 2017 – 2020

Vision for its territory + municipal policies

**2016: ACTIONS DIAGNOSTIC
AND FEASIBILITY STUDIES**



2017: FIRST ROADMAP

15 practical actions

**2017 TO 2019: ACTIONS DIAGNOSTIC
AND FEASIBILITY STUDIES**



2018-2019: SECOND ROADMAP

10 to 15 actions

Methodological reminder: Actions of the Paris Circular Economy Plan – a multi-year programme until 2020

ACTION 1

BUILDING MATERIALS: DEVELOP TERRITORIAL ORGANISATION FOR THE RECOVERY AND REUSE OF MATERIALS

BACKGROUND

The flow of final waste from building materials represents a volume of 3.5 million tons per year in Paris, of which the vast majority is excavated earth¹.

The structuring of practices (exchanges, sharing of knowledge and expertise), and logistical organisation (storage, transport), form the two main obstacles for the development of building material reuse and recovery. Reuse of materials can be considered on several levels, involving different storage space requirements:

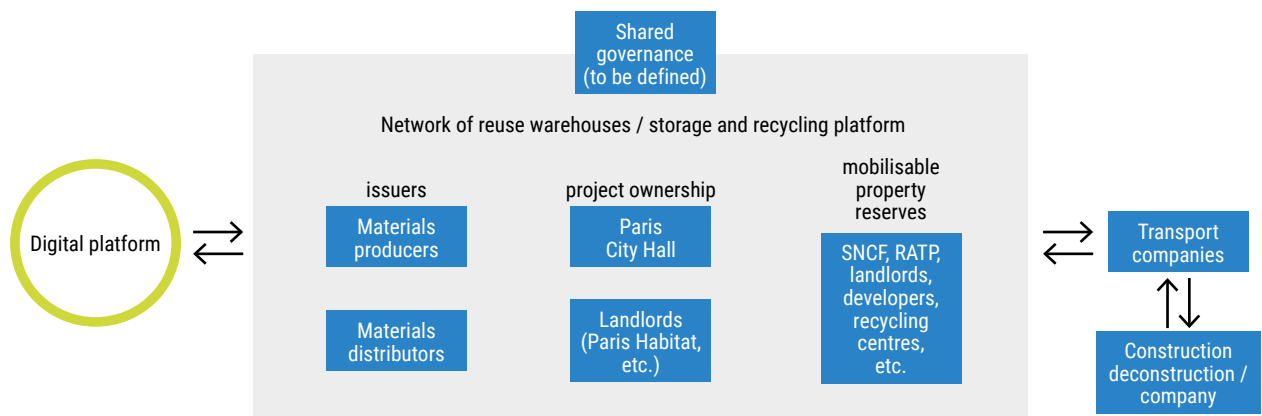
- On site, when the size of the building site is sufficient to carry out deconstruction, sorting, reconditioning, transformation, storage and reuse operations, all at the same time; In a dense urban environment, this method will be restricted to a limited number of building sites (see the Néaacité eco-district in Saint-Denis);
- By coordinating the availability of materials from a given building site with the needs of another building site (lean management with simple logistics, and prior provision of data via a digital exchange platform);
- By grouping together materials at local reconditioning and storage centres. This involves more significant logistics and a territorial fabric that minimises impacts.

Availability of land, even on a temporary basis, is essential for such platforms and may require an inventory. Plaine Commune has conducted a metabolism study and mapped out land resources that could be mobilised to store and recover materials from construction projects in its territory. Regarding excavated earth, it is the subject of a specific study (led by the DEVE – Department of Green Spaces and the Environment) in order to produce a more detailed diagnosis of earth recovery potential, while taking into account the issues of quality and traceability. For the recovery of materials from finishing works, the fabric will depend on the specific needs of each material recovery channel. This may require:

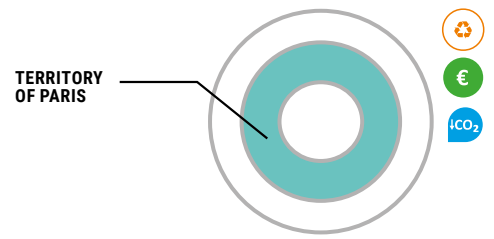
- collection points located near deconstruction sites or drop-off points near recycling centres / distributors (e.g. plaster and window recovery channels currently being deployed);
- processing or dismantling centres for recycling channels;
- grouping or storage sites for each recycling channel or building site.

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MAP OF ACTORS



^{1/} Source: report by Sabine Barles, professor of urban planning at Pantheon-Sorbonne University (UMR Géographie-Cités): «Measuring the ecological performance of cities and regions: The metabolism of Paris and Ile-de-France»



OPERATIONAL DEPLOYMENT

Looking ahead to organising the logistical aspects of circular construction, the action aims to initiate exploratory work within a small area, such as an arrondissement or neighbourhood, by identifying and mapping out available spaces that could be used as conditioning and storage centres, according to the following steps:

1. Define one or two experimental areas, that are consistent with the sites selected as part of action 2 (Building sites: diagnosis, sorting and recovery of site resources), major urban development projects and the conclusions of the study on excavated earth;
2. Dynamically describe the materials storage offering in the experimental area (location, capacity, specific characteristics, access, time frame), by identifying existing centres (material wholesale centres on the banks of the Seine, recycling centres, material retail outlets larger than 400 m²), centres currently being created or planned, locations available for a finite time (potential temporary centres), and areas not covered (less densely populated areas with needs);
3. In accordance with the study on excavated earth, jointly construct a governance mode that enables all construction professionals in the experimental area to access information and use facilities, whether they are digital or physical, public or private, permanent or temporary, etc.

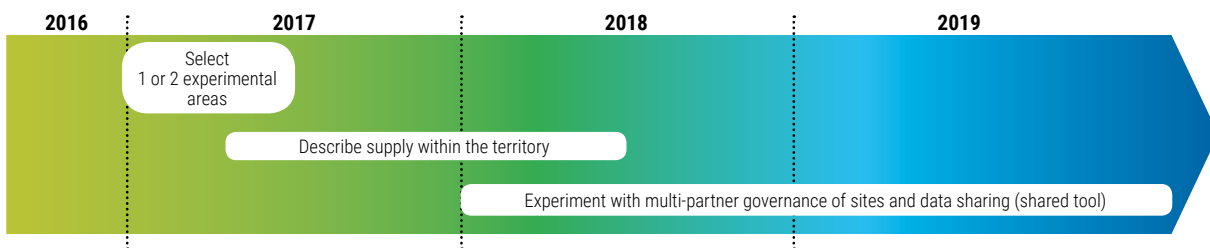
INITIATOR

Department of Green Spaces and the Environment (DEVE), Urban Planning Department (DU).

Other City of Paris departments involved: Department of Roads and Transport (DVD), Department of Heritage and Architecture (DPA), Department of Accommodation and Housing (DLH), Department of Economic Attractiveness and Employment (DAE).

Prospective partners: APUR, Metropolis of Greater Paris, Société du Grand Paris, Grand Paris Aménagement, Parisian developers.

SCHEDULE



Means to provide: mobilisation of resources in the form of a project team and development of a data-sharing IT tool.

Performance indicators: percentage of Paris' territory covered.

Impact indicators: resources exchanged (in tons), CO₂ avoided and money saved (€).

Prospects: Deploy operational tools and a dynamic map of storage and reconditioning facilities by 2020.

ACTION 2

BUILDING SITES: DIAGNOSIS, SORTING AND RECOVERY OF SITE RESOURCES

BACKGROUND

Construction and public works waste comes from sites under public or private ownership. Waste management differs according to the type of project (construction or public works), due to factors such as the number of actors per site, the nature of waste produced, production locations and possible treatment methods.

In the Île-de-France region, waste from construction and public works sites represents an estimated potential resource of 30 million tons, of which around 14 million is from the building sector (67 % for deconstruction activities, 28 % for renewal and 5 % for new build). Material recovery (recycling) of construction and public works waste is currently estimated to be only 26 % in Île-de-France². Within the framework of the Grenelle Environment Roundtable and the Energy Transition Law for Green Growth, several commitments directly concerning construction and public works waste have been made:

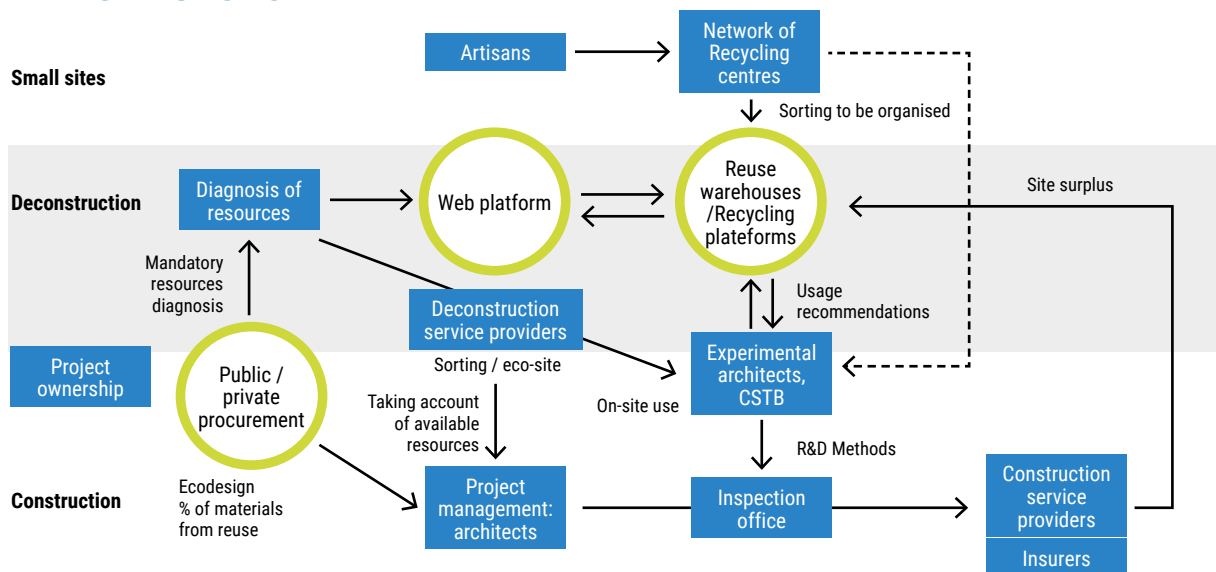
- Obligation to perform a waste diagnosis for sites larger than 1000 m²;
- Material recovery of 70 % of construction and demolition waste by 2020 (European Framework Directive of 19 November 2008);

- Obligation for dealers of building materials for professionals, with more than 400 m² of retail space, to take back waste from materials of the same types, on-site or nearby, as of the 1st of January 2017.

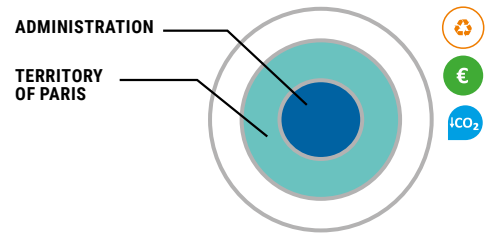
At regional level the PREDEC (Regional Plan for the Prevention and Management of Construction Site Waste) for Île-de-France was adopted in June 2015. It forms the reference document for all construction and public works professionals, with the aims of “reducing and better managing construction site waste”, and reusing and recycling construction site resources. Against a background of saturated outlets and high raw materials prices, while numerous construction projects are underway (Greater Paris), these recent obligations are creating favourable conditions for scaling up, beyond emerging initiatives that remain experimental. Examples include Arketip’s resources diagnosis for the development of reuse, the Démoclès project for the recycling of materials from finishing works and the structuring of related schemes, experimental architecture with Encore Heureux or Bellastoc, materials exchange platforms and the materials passport.

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MAP OF ACTORS



^{2/} Source: 2010 data from the PREDEC (Regional Plan for the Prevention and Management of Construction Site Waste – June 2015) and the ORDIF’s Île-de-France waste dashboard (2015 issue)



OPERATIONAL DEPLOYMENT

The aim is to provide impetus for experimental projects on sites that are representative of the diversity of construction modes and buildings in Paris, according to the following method:

1. Make reuse and recovery in construction one of the work focuses of the DPA's Methods, Studies and Works network, supported by a project manager in its relations with institutional actors, such as the CSTB (Scientific and Technical Building Centre) and FFB (French Building Federation), to make progress on the most complex subjects; Internal innovation, in line with dedicated resources, aims to facilitate the removal of obstacles met during experiments;
2. Identify 5 to 10 representative pilot sites, both new build and renewal, in the public sector. For example: the Reuilly

barracks and Alembert school in Montévrain (underway), the Saint-Vincent-de-Paul hospital, *Les Canaux*; sites with specific regulations such as schools, crèches, hotels, 2024 Olympics sites, etc.;

3. According to available budgets (vote on budgets accordingly), grant prime contractors specific economic resources and time to find solutions, while capitalising on initial feedback received (Pavillon Circulaire, Arketip, Démoclès);
4. Stimulate and coordinate a community of actors in the area of materials reuse, communicate in real time on the successes and failures of experiments, share feedback, pool tools and prepare for scaling up (a partner will be identified to manage this stage).

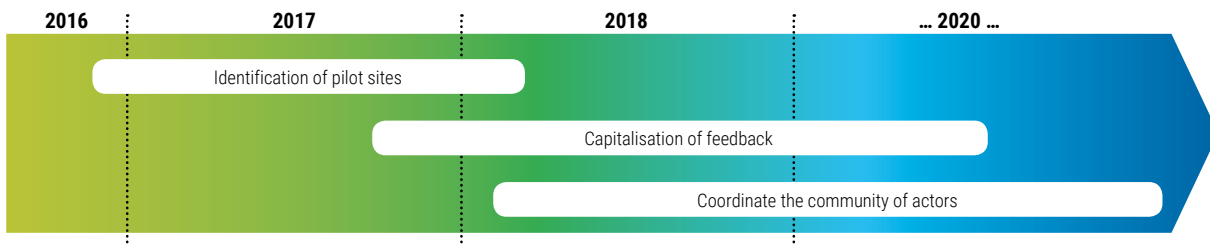
INITIATOR

Department of Heritage and Architecture (DPA).

Other City of Paris departments involved: Department of Green Spaces and the Environment (DEVE), Urban Planning Department (DU), Department of Accommodation and Housing (DLH), Department of Economic Attractiveness and Employment (DAE).

Prospective partners: FFB, REFER (Regional network of actors for reuse), Encore Heureux, Bellastock, Recylum, social housing providers, Arketip, EIVP engineering school, Paris&Co's "Immobilier de demain" innovation platform, and more generally the project owners and prime contractors of pilot sites.

SCHEDULE



Means to provide: mobilisation of a project team and coordination of experimentation. Joint-funding of experiments with prime contractors.

Performance indicators: number of pilot sites selected, duration and capitalisation of experiments, financial and human resources mobilised.

Impact indicators: materials recovered through reuse and recycling (in tons), CO₂ avoided and money saved (€).

Prospects: finalise experimentation and make the systematic performance of resources diagnosis mandatory, via building and demolition permits, as of 2020.

ACTION 3

SUSTAINABLE AND CIRCULAR CONSTRUCTION: LAY THE FOUNDATIONS OF NEW ECONOMIC MODELS

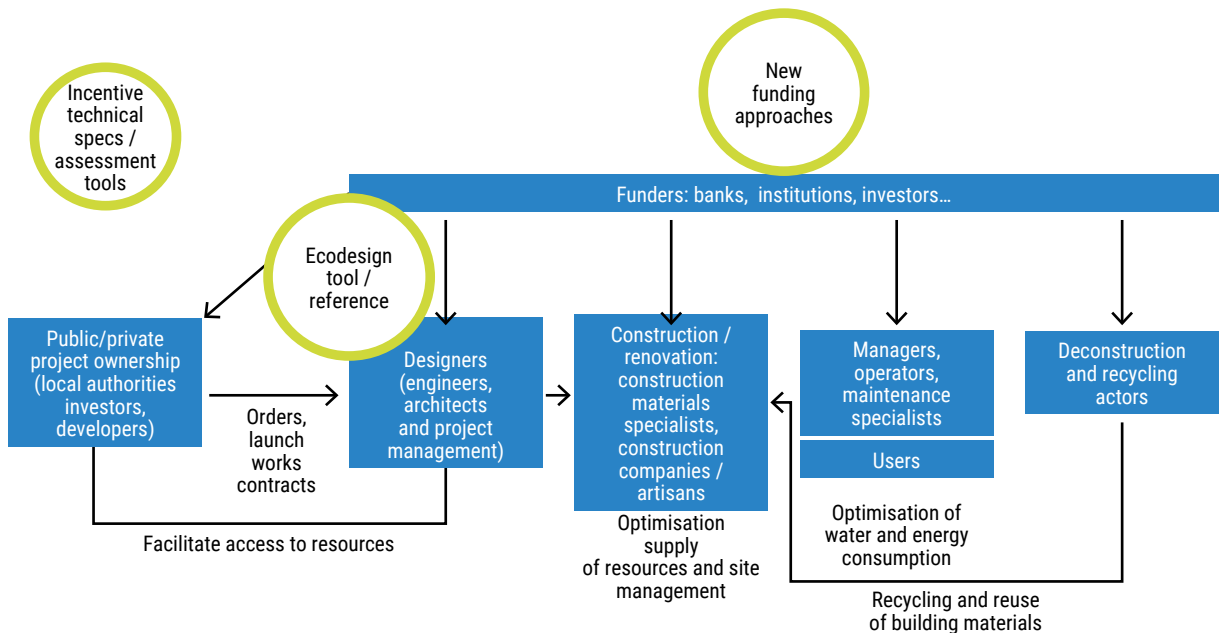
BACKGROUND

The circular economy approach in construction is more specifically aimed at optimising resource use, while taking into account the entire lifecycle of projects, from their design, to the choice of materials and initial equipment, and right up to their end stages (deconstruction, reuse and recycling). Within the framework of the circular economy, sustainable construction also means using local or recycled raw materials, and limiting resource consumption (energy, water, etc.) by building sites and future constructions, while taking into account the issue of uses, reusing or recycling building-site resources, working on building multi-functionality, and integrating the impact on resources in project assessments and cost calculations. Firstly, obstacles must be identified, for example in regulatory and standards systems, particularly for public facilities, and actors likely to take action must be mobilised.

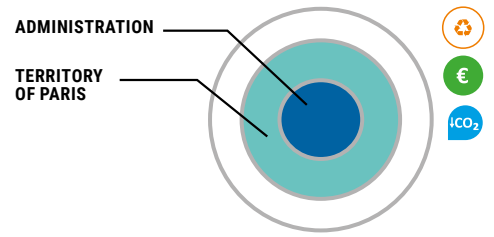
Although many sustainable construction guides currently exist (certifications, labels, standards, references) and while the environmental labelling project for buildings³ is liable to encourage the taking into account of the circular economy in construction, many obstacles related to regulations (mandatory approval of building materials and processes), materials (difficulty of storing materials produced by construction in dense areas) and funding (cost overruns related to changes in practices in particular) stand in the way.

There is also much to be gained by designing new business models that offer more incentives for all actors in the value chain, either by increasing the potential revenue for actors (higher sales prices), or by reducing costs (for example by developing tools to analyse projects in terms of the overall cost or to optimise costs through materials savings or pooling).

MAP OF ACTORS



^{3/} This label, based on the entire lifecycle of the building, would not only integrate information on energy consumption, but also on other criteria, such as CO₂ emissions, waste production and water consumption.



OPERATIONAL DEPLOYMENT

The aim is to promote materials reuse in building construction projects:

1. Identify obstacles, notably within legislative, regulatory and standards frameworks, and in particular for public facilities; Define the means, methods and schedule to mobilise actors able to change this environment (use provisions of the law on the freedom of creation, architecture and heritage of the 7th of July 2016);
2. Launch experiments involving various types of projects (construction, renovation, renewal), in order to test the reuse of various materials and make it reliable, according to opportunities that arise. Such experiments may be given impetus via potential partnerships [the Caisse des Dépôts group,
- the French environment and energy management agency (ADEME)] as part of a call for projects. It seems advisable to encourage the proliferation of experiments of all types, on all scales, and on the initiative of all actors;
3. Increase the visibility of this network of innovators and their projects, and create social acceptability by using the dynamic of the participatory budget and with support from the Paris Architecture, Urban Planning, and Environment Council (CAUE 75);
4. Gather feedback from these reuse practices in construction, in order to enhance tools used by development and construction actors (City of Paris in-house tools and reference frameworks used by planners and developers) and supplement provisions in this area in urban planning documents.

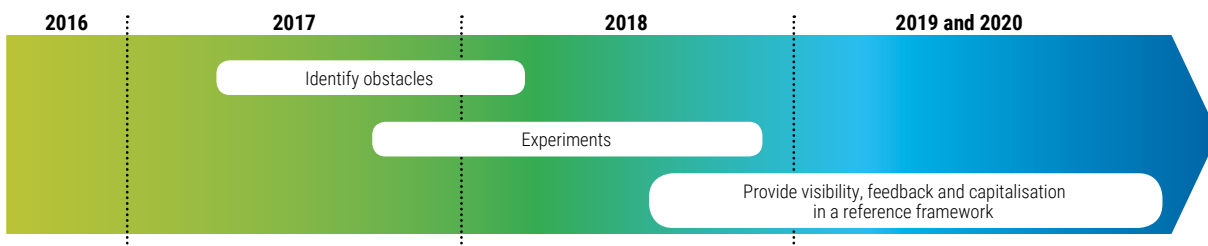
INITIATOR

Department of Heritage and Architecture (DPA) and Department of Economic Attractiveness and Employment (DAE).

Other City of Paris departments involved: Urban Planning Department (DU), Department of Roads and Transport (DVD), Department of Accommodation and Housing (DLH), Department of Green Spaces and the Environment (DEVE), Department of Finance and Procurement (DFA).

Prospective partners: CSTB, partner institutions and potential co-funders (CDC, ADEME, Île-de-France Region, Chamber of Commerce and Industry, FFB, etc.), organisations specialised in reuse (REFER, Recylum, Encore Heureux, Bellastock, etc.), developers, social housing providers, CAUE 75, Pavillon de l'Arsenal, Paris & Co.

SCHEDULE



Means to provide: inter-departmental working group.

Performance indicators: number of actors involved in experimental projects; number of experimental projects initiated.

Impact indicators: to be established in 2017.

Prospects: to be defined in 2017.

ACTION 4

WASTE REDUCTION: REDUCE DISPOSABLE PACKAGING USE

BACKGROUND

About a third of the overall volume of household waste in France is formed of packaging waste. While some packaging (referred to as “primary” packaging) is useful for the conservation of food, other packaging could be avoided (grouped, secondary or transport packaging) by rethinking product designs and distribution methods. This is encouraged by the French Energy Transition Law for Green Growth (TECV) of the 17th of August 2015: one of the measures aims to launch experiments to develop a deposit system for packaging, in order to promote ecodesign and optimise the second-life cycle.

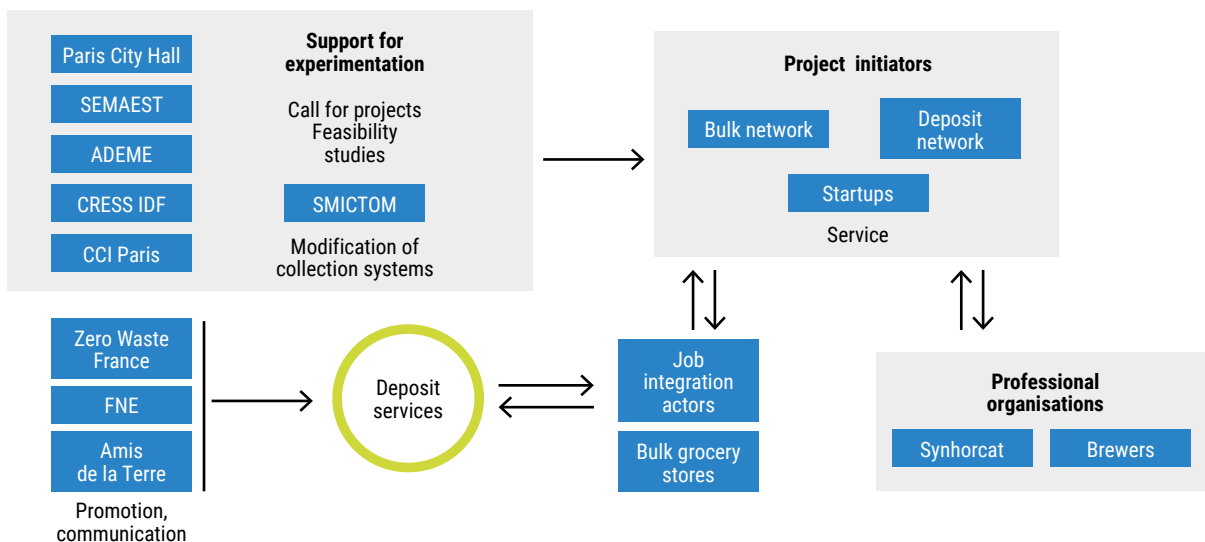
ADEME and Eco-Emballages indicate that in 2006 nearly half of drinks contained in glass bottles⁴ in out-of-home catering were deposited. In the coffee shop, hotel and restaurant channel, deposit systems made it possible to avoid 500,000 tons of waste in France⁵. Deposit systems also offer financial benefits for producers: the Bofferding brewery estimates that the cost of disposable packaging is seven times greater than reuse. Glass waste avoided using deposit systems could also cut

costs for local authorities (glass management cost = €1.50/resident). Several initiatives exist in France (Distro, bottle deposit in Brittany, Jean Bouteille, deposit and bulk sale of drinks in grocery stores). Despite the benefits offered by deposit systems (reduction of the environmental impact of containers, job growth potential – 27,000 jobs created in Germany⁶–, additional income for collectors, favourable public opinion, etc.), they remain an area for development.

Elsewhere, according to Zero Waste France, individual doses, take-away boxes, plastic bags and disposable bags currently occupy half of our rubbish bins in terms of volume and a third in terms of weight. There are currently a dozen 100%-bulk retail outlets in France and, according to Zero Waste France once again, there will be more than 200 by 2018.

The other form of leverage to reduce packaging is to work on product ecodesign: packaging is responsible for approximately 60% of the environmental impact of a product.

MAP OF ACTORS

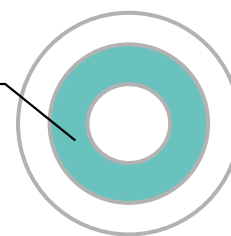


^{4/} Bottles of mineral water, non-alcoholic refreshment drinks, beer and wine

^{5/} «Development of reuse of industrial packaging – France 2008 overview,» ADEME, October 2008

^{6/} Survey conducted by Price Waterhouse Coopers, 2012

TERRITORY OF PARIS



OPERATIONAL DEPLOYMENT

This involves supporting experiments in Île-de-France and raising awareness among relevant sections of the public, in conjunction with the Local Prevention Plan for Household and Assimilated Waste:

1. Organise a "Foyers témoins-recours au VRAC" (model households-use of bulk) campaign linked with the "famille zéro gaspi" (zero-waste family) campaign and communicate the results; Form a panel of households with good consumption practices to produce less waste; Organise and oversee meetings with the households in order to inform them, federate them and maintain their motivation. Monitor, measure and analyse the results;
2. Create a "Bento Box et restauration à emporter" (Bento Box and take-away food) campaign in partnership with Zero Waste France: creation of a working group, identification of

partners for the production of containers, search for a target neighbourhood for the experiment (according to possibilities identified for the washing of containers), and "recruitment" of take-away food shops interested;

3. Perform a global opportunity study, involving all actors, of the technical and economic feasibility of the deposit system. As a priority, perform a diagnostic of potential resources in Île-de-France and available premises for cleaning, and remove technical, logistical and economic obstacles in the way of deploying the deposit system in Paris;
4. Cross-cutting action: organise a communication campaign for the general public regarding these two schemes. Firstly, communicate regarding existing systems in Paris, and provide training on good practices to be established regarding the deposit system and bulk sale, and lastly communicate regarding the results of both schemes;
5. Support the establishment of 100 %-bulk retail outlets.

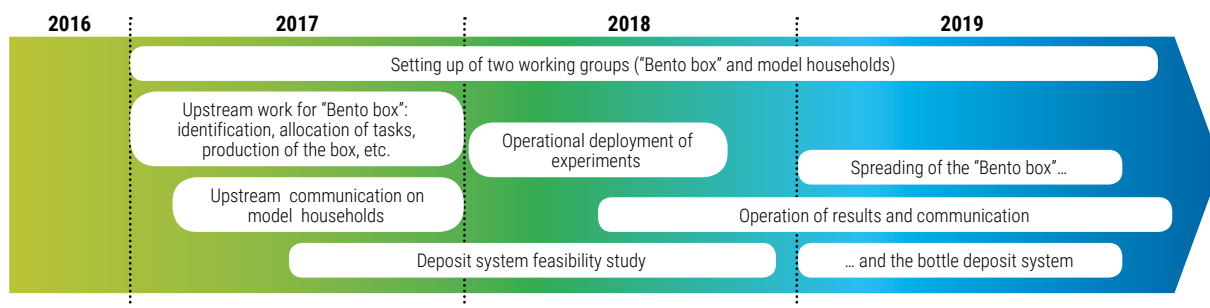
INITIATOR

Initiator: Department of Economic Attractiveness and Employment (DAE).

Other City of Paris departments involved: Department of Sanitation and Water (DPE), Department of Green Spaces and the Environment (DEVE), Department of Educational Affairs (DASCO) (premises for cleaning), Department of Information and Communication (DICOM).

Prospective partners: Zéro Waste France (model household campaign), Jean Bouteille, Réseau Consigne, Synhorcat/La consigne francilienne, ADEME, SYCTOM (communication regarding results), distribution networks (retail outlets), district town halls (transmission of information, availability of training venues), take-away food actors.

SCHEDULE



Means to provide: feasibility studies, communication campaign, funding for the "Bento Box", small equipment for the model household campaign.

Performance indicators: number of model households involved, number of bento boxes distributed.

Impact indicators: quantity of waste avoided by the two schemes.

Prospects: deployment of the "Bento Box" and deposit system throughout the territory

ACTION 5

REPAIR: PROMOTE THE REPAIRING OF OBJECTS WITH A SET OF COMPLEMENTARY INITIATIVES

BACKGROUND

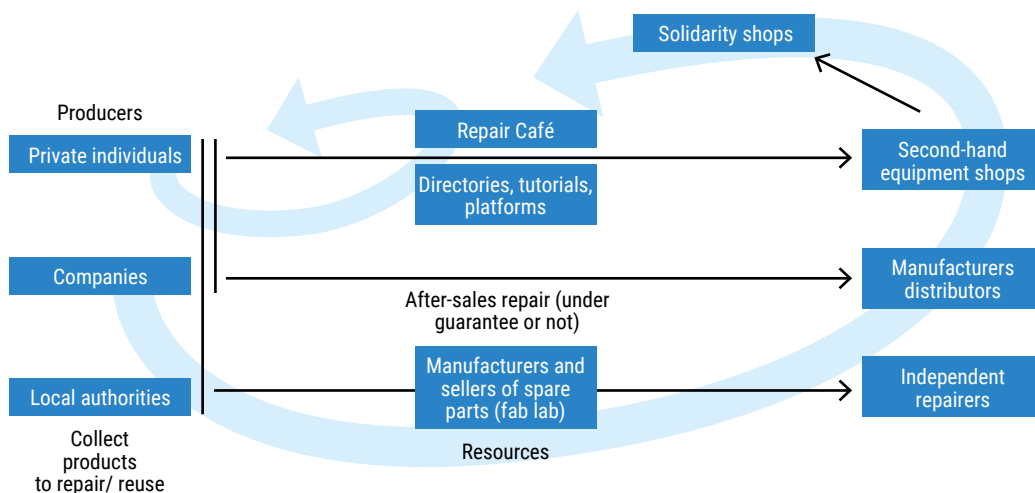
The potential of repair activities is related to both available premises devoted to repairing, sorting, cleaning and upcycling, and information communicated to consumers about resources available in their local area (repairers, artisans, manuals, tutorials and spare parts). Elsewhere, the regulatory framework encourages the development of repair activities: the Waste Framework Directive (No. 2008/9/EC) places reuse at the top of the hierarchy of treatment methods, ahead of recycling and recovery. The European directive on ecodesign, the obligation to display the availability of spare parts of products sold in retail outlets, and the specifications of producer responsibility organisations, which set target figures for reuse, are contributing to positive trends in the sector (+20 % in turnover for actors in the social and solidarity economy between 2011 and 2013, +12 % for second-hand goods actors⁷¹). Against this background, how can local repairing be promoted and the scrapping of equipment be avoided? Which strategy should be adopted in the face of product diversity (bicycles, clothes, electrical and electronic equipment, furniture, etc.) in order to enable their repair?

At national level, the major trends observed are as follows:

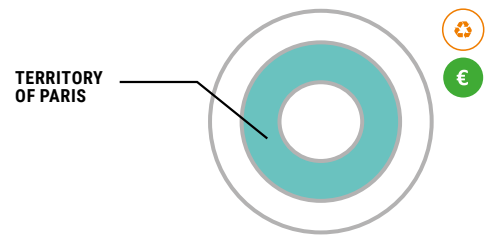
- types of household appliances most often repaired: cleaning (washing machines, dishwashers), refrigeration (fridges, freezers), cooking (ovens, hobs);
- almost all large household appliance repairers guarantee their repairs, generally for three months;
- rates of non-repair are 20 % for independent retailers and 12 % for mass retailers;
- the maximum repair cost accepted by customers corresponds to 35 % of the price of a new replacement.

Unsurprisingly, the main factors encouraging people to replace rather than repair appliances are cost and repair times. In addition to these factors, there are the practices of appliance manufacturers which harm independent repairers, such as agreements between manufacturers and insurers to encourage the purchase of warranty extensions, the unavailability of spare parts at competitive costs, the high cost of reprogramming electronic appliances, the insufficient flat fees paid to repairers by manufacturers to repair products still covered by guarantee, and the choices of certain distributors that favour the purchase of a new replacement.

MAP OF ACTORS



⁷¹ Source: ADEME - Reuse, repair and refurbishing report – 2015 issue



OPERATIONAL DEPLOYMENT

The action deployment method involves increasing visibility of existing actors and promoting the use of their services among the general public:

1. Support the development of existing tools/platforms (APUR map of new economic models, produitspourlavie.org - Les Amis de la Terre, Récup-ID, SYCTOM (the metropolitan agency for household waste), and the Regional Council of Île-de-France) in order to better identify and locate repair actors. Also include tutorials to promote self-diagnosis and assess the reparability of an object;
2. Develop recycling centres and associated repair workshops (link with action 7), in particular establish the Envie network in Paris;
3. Support the creation of participative DIY workshops, or "makerspaces", "bricothèques" (to learn about and loan tools), and encourage the establishment of "repair café" type projects;
4. Develop repairer training schemes, in particular for people who are the most disconnected from the job market;
5. Communicate regarding repair actors (for example at the European Waste Reduction Week),
6. Raise awareness, train and facilitate the "repair option" by using Practical Interdisciplinary Teaching schemes (secondary schools), in order to organise repair events in schools (for example Repair Cafés).

INITIATOR

Department of Economic Attractiveness and Employment (DAE).

Other City of Paris departments involved: Department of Sanitation and Water (DPE), Department of Educational Affairs (DASCO).

Prospective partners: REFER, ENVIE, REPAIR CAFE, Chambers of Trades, environmental organisations, educational authority, SYCTOM, APUR, Regional Council of Île-de-France.

SCHEDULE



Means to provide: mobilisation of an existing full-time equivalent and strengthening of teams, assistance with strengthening of tools, communication/awareness-raising campaigns, support for the development of recycling centres.

Performance indicators: number of Repair Cafés organised per year and per arrondissement, number of participants at Repair Cafés, number of recycling centres organised to supply repair actors with repairable objects by 2020, number of places devoted to repair.

Impact indicators: objects repaired at Repair Cafés (in tons), objects redirected/repaired from recycling centres (in tons).

Prospects: an operational Repair Café in each arrondissement by 2019, and all recycling centres in Paris organised to supply repair actors with repairable objects by 2020.

ACTION 6

REUSE: CREATION OF A CENTRAL MUNICIPAL WORKSHOP FOR THE REUSE OF BUILDING MATERIALS

BACKGROUND

As part of a consultation on the most exemplary administration, personnel of the Department of Heritage and Architecture (DPA) expressed their wish to develop a self-managed municipal warehouse for the reuse of building materials, with the mission of reconditioning, preparing, repairing if required, and storing, in order to improve availability of products and increase opportunities for reuse.

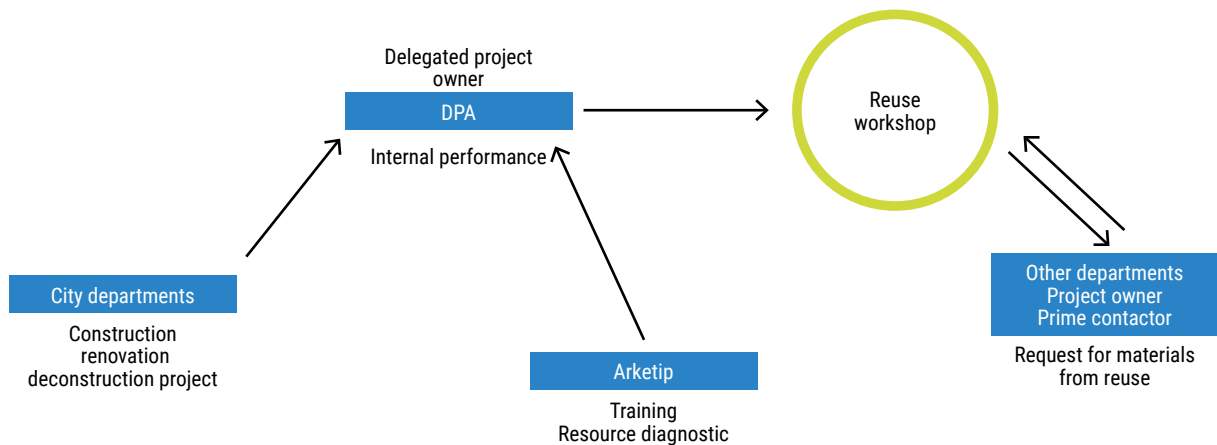
The DPA ensures the safety and maintenance of 3600 municipal buildings (facilities, administrative offices, district town halls, etc.). It is also in charge of construction (from design to delivery), maintenance and renewal works. In 2015, 4400 maintenance projects and 1800 works projects were completed. Therefore, this raises the issue of the magnitude of the potential for reuse of materials produced by or allocated to municipal buildings.

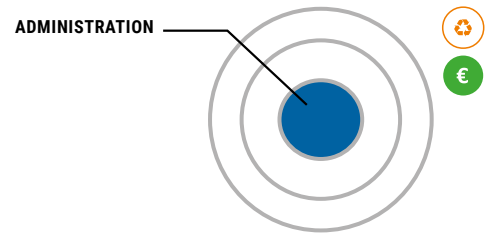
Iconic and innovative projects, such as construction of the Pavillon Circulaire during the General Assembly on the Circular Economy, and the Butte aux Cailles swimming pool (heated by an eco-responsible data centre), illustrate expertise that can already be mobilised to meet the City of Paris' environmental commitments.

The DPA proposes taking things to the next level by coordinating production within the department, in order to be able to perform works for all of the City of Paris' departments, by first reusing materials from finishing works (woodwork, locks, electrical equipment and piping) as far as possible, and then materials from construction site surplus. This action resonates with other initiatives in Île-de-France related to the reuse and recycling of materials:

- The materials exchange platform developed by Paris Habitat following the experimental project of the Reuilly barracks;
- The recycling and reuse of paving stones and kerbs by the Department of Roads and Transport at the Bonneuil-sur-Marne technical centre (8000 to 10,000 tons per year);
- Launch of the Arketip scheme by the REFER, in order to audit, qualify and quantify the on-site and off-site reuse potential of materials and objects prior to deconstruction/renovation projects.

MAP OF ACTORS





OPERATIONAL DEPLOYMENT

Creation of the workshop to maximise use of materials produced by reuse in building projects managed internally will be done in stages:

1. Confirm the location of the workshop site (the Bédier site, delivery of which is planned mid-2017 is under consideration);
2. Create the production coordination system (networking of warehouses) within the DPA, and train personnel in identifying, dismantling, reconditioning and reusing materials from finishing works;

3. Set up on-site inventories and logistics means;
4. Install the workshop and make it operational;
5. Organise stock management and orders linked with the new material ordering software in order to give reuse priority over purchases.

INITIATOR

Department of Heritage and Architecture (DPA).

Other City of Paris departments involved: Department of Accommodation and Housing (DLH) (Building Administration Department), Department of Economic Attractiveness and Employment (DAE), Department of Roads and Transport (DVD), Department of Green Spaces and the Environment (DEVE) in conjunction with other departments.

Prospective partners: REFER, Arketip, CSTB.

SCHEDULE



Means to provide: installation and development of the workshop site, reorganisation of teams to manage the workshop and on-site inventories, IT development of the stock and order management tool.

Performance indicators: opening of the workshop, operation of the workshop.

Impact indicators: material collected (in tons), materials reused (in tons), money saved (in comparison with purchasing new).

Prospects: open the workshop to other project owners or prime contractors in order to optimise reuse and recovery of materials from existing buildings.

ACTION 7

RE-MANUFACTURING IN PARIS: DEVELOP CHARITY SHOPS AND REUSE CENTRES IN PARIS

BACKGROUND

The European Waste Framework Directive of the 19th of November 2008 provides strong guidelines:

- Give priority to the prevention of waste and reuse over recycling, incineration and landfilling;
- A target of 50 % reuse and recycling of household waste in 2020;
- The “principle of proximity” which encourages the management of waste as close as possible to its place of production;
- Establishment of the principles of “polluter-payer” and “extended responsibility of the producer” in order to fund waste prevention, collection, sorting and treatment activities.

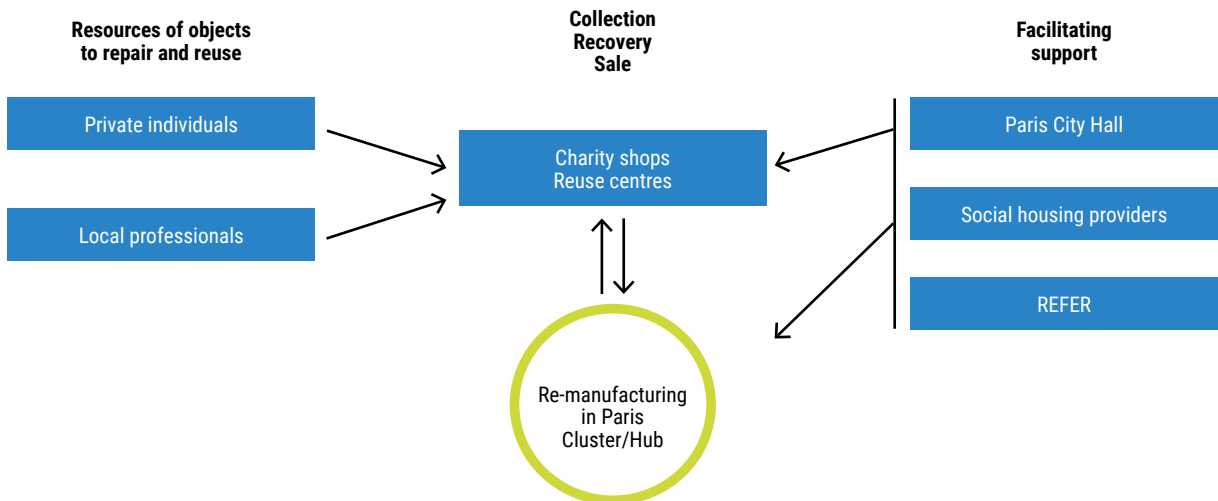
On the 17th of December 2010, the law on the timetable for implementation of the Grenelle Environment Roundtable transposed this directive by ordinance, confirming a marked target of 45 % recycling and reuse for 2015. In August 2015, the Energy Transition Law for Green Growth increased the recycling and reuse target, setting it at 55 % for 2020.

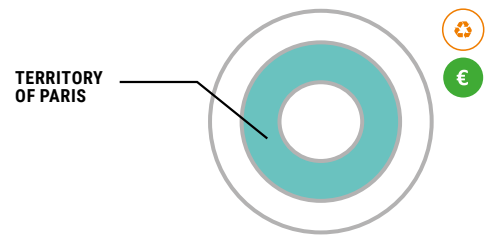
Ressourceries® (network of reuse centres) and charity shops are making a significant contribution to the achievement of these targets, by reusing objects and materials that would otherwise have been discarded. These objects are collected and then sold, sometimes after being reconditioned. Beyond their direct contribution to waste reduction, these organisations also raise public awareness and address social challenges by providing low-cost equipment and job-market integration.

In 2016, the City of Paris had seven general recycling centres, which accept all types of waste flows, and three recycling centres specialised in specific flows (toys, creative materials, books). In 2015, they collected nearly 3000 tons of objects, most of which were thus diverted from landfill, incineration or recycling.

However, the potential resources remain huge, if the 20,000 tons of textiles still collected among household waste, or the 65,000 tons of bulky waste collected each year by the City’s rubbish collection service, are taken into account.

MAP OF ACTORS





OPERATIONAL DEPLOYMENT

The network of reuse organisations in the territory (with the target of 20 reuse centres in Paris in 2020) will be built in stages:

1. Continue direct support provided for the establishment of reuse centres in Paris: assistance with finding affordable premises, technical support for the setting up of projects (with the REFER for example), economic support for start-ups over a 3-year period, and organisation of temporary reuse centres by social housing providers in order to test the activity in a given neighbourhood before considering a long-term project;
2. Sustainability of reuse organisations: economic support related to the tonnage of objects collected and the number of people covered by awareness-raising activities, communication on the existence of these organisations or events they hold, facilitated access to potentially reusable resources from recycling centres (introduction of reuse boxes, training

of reception staff), increase in the number of awareness-raising workshops organised by reuse centres in educational establishments and social centres;

3. Launch of a study for the creation of a “Re-manufacturing in Paris” cluster, which would make it possible to pool resources and contribute to the scaling up of reuse in Paris by providing spaces and means of production and research. This cluster would integrate, among other things, a wood workshop and an IT reconditioning workshop, as well as an R&D lab to develop new local techniques for the recovery of objects and materials, and create added-value contributing to the economic balance of reuse centres. This cluster would also make it possible to capture, store and recover large volumes of objects produced by professionals.

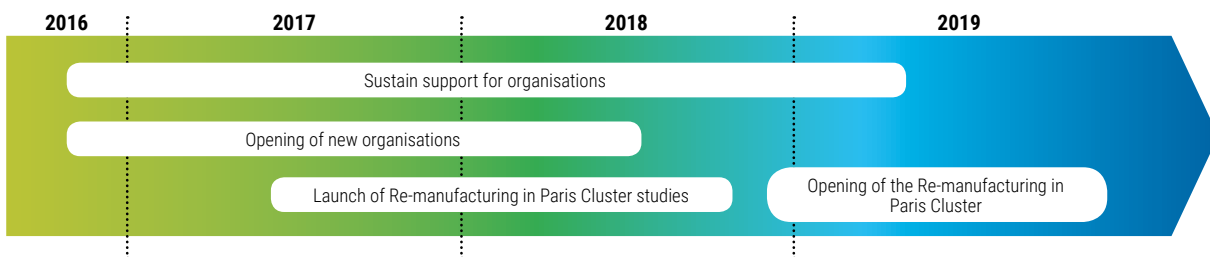
INITIATOR

Department of Economic Attractiveness and Employment (DAE).

Other City of Paris departments involved: Department of Sanitation and Water (DPE), Department of Accommodation and Housing (DLH), Department of Heritage and Architecture (DPA).

Prospective partners: REFER, social housing providers.

SCHEDULE



Means to provide: mobilisation of an existing full-time equivalent and strengthening of teams, direct investments, financial and technical support of organisations, studies for the creation of the cluster.

Performance indicators: number of reuse centres, launch and completion of feasibility studies for the cluster.

Impact indicators: objects collected (in tons), objects recovered (in tons), waste avoided (in tons).

Prospects: create bridges between the network of reuse centres and tools set up for the construction and public works sector, in order to optimise reuse of materials at all levels (from artisans and small-scale professionals to the biggest companies).

ACTION 8

INCUBATOR: CREATE AN INNOVATION PLATFORM FOR THE CIRCULAR ECONOMY

BACKGROUND

On the basis of dedicated venues, the incubators, Paris&Co developed innovation platform models that promote the emergence of innovative fledgling companies and facilitate networking between large groups and startups. Paris&Co demonstrated the success of this concept with ten thematic innovation platforms: e-health; sport; finance; publishing; tourism; property; logistics and urban mobility; food; digital, cultural and creative industries; social entrepreneurship.

In September 2014, the call for experiments "improving the urban metabolism" led to the selection of 13 innovative startup and business projects in the circular economy sector, with the aim of reducing pressure on natural resources (reduction of the importation of earth for building sites and waste production, or recovery of biowaste). This call for projects highlighted the essential and structuring role played by the networking of actors for the emergence of synergies, deployment of projects and growth of the circular economy. The creation of an innovation platform devoted to the circular economy could therefore make a significant contribution to maintaining this impetus.

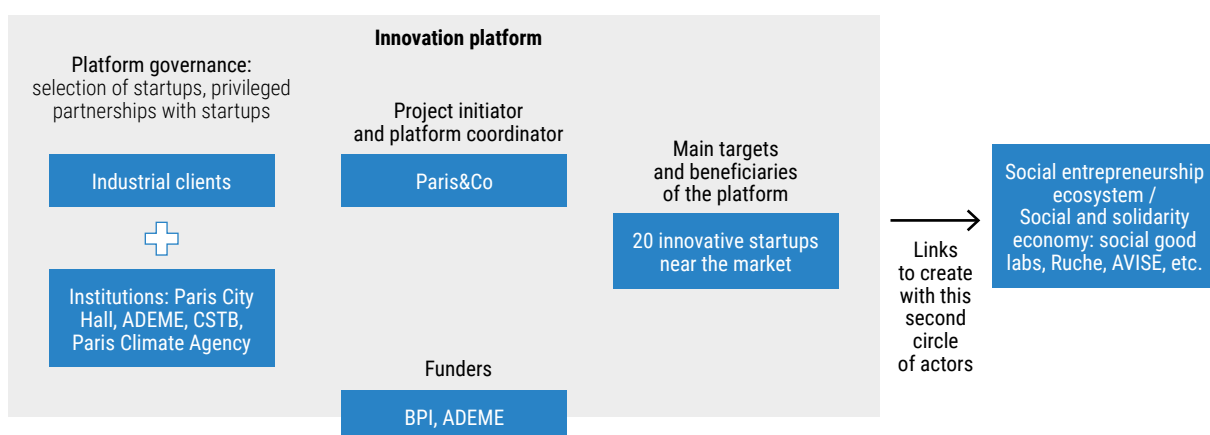
Lastly, while actors of the social and solidarity economy represent a significant part of growth of the circular economy, Paris&Co's innovation platform concept is more suited to the

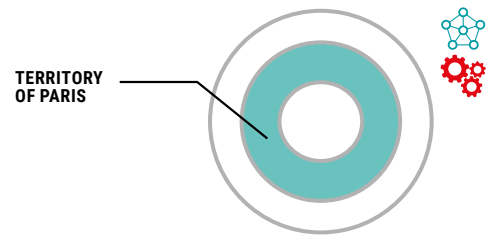
target of startups close to the market. Links need to be created with the ecosystem of innovative non-profit actors, or social entrepreneurs, operating in the functional economy, reuse or repair.

The innovation platform concept

- Annual call for applicants with the aim of selecting 20 startups, which will be funded using a startup fund during their first year (€20 to 30K received). As of the second year, there will be no more financial support and participation in the incubation programme costs up to €5K per year + €320 excl. VAT per m² per year for hosting.
- **Criteria:** to be innovative (particularly in technological terms), have €30K of capital and not have received significant assistance.
- **Offer:** connection to an ecosystem (institutions, large groups and other startups), coaching, meetings with large groups.
- **Selection committee:** Paris&Co, City of Paris, founding partners (industrial companies).

MAP OF ACTORS





OPERATIONAL DEPLOYMENT

The action involves not only creating an innovation platform for the circular economy, but also to maximise its impact on transformation of the territory of Paris:

1. Identify and approach industrial and institutional players in partnership with the platform (future members of the Selection Committee), representative of the seven pillars of the circular economy;
2. Recruit startups via a call for projects to be launched during the first quarter of 2017. Prior to this, widely publicise the call for applicants, in particular among networks of entrepreneurs or innovative fledgling companies interested in the circular economy (especially actors in the social and solidarity economy and social entrepreneurship);
3. Launch the platform and select startups by September 2017. The City of Paris could possibly choose to support one or two candidates on a voluntary basis;
4. Set up a programme of joint events and exchanges with the community of non-profit actors or innovative entrepreneurs engaged in the circular economy;
5. Extend and scale up the impact of this action throughout the territory of Paris. Paris&Co could monitor the main innovative companies in the circular economy in Paris in order to make them more visible and promote networking with potential partners or buyers. The City of Paris could use, wherever possible, the leverage of public procurement in order to deploy innovative solutions provided by startups throughout the territory of Paris.

INITIATOR

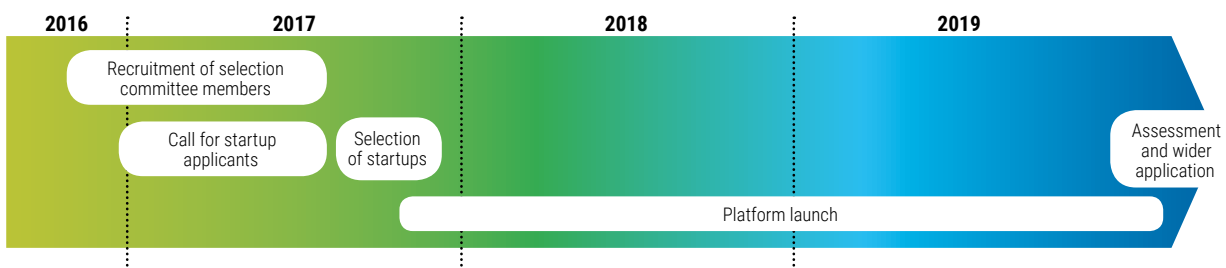
Department of Economic Attractiveness and Employment (DAE) (Paris&Co).

Other City of Paris departments involved: Department of Green Spaces and the Environment (DEVE).

Prospective partners: Industrial companies (members of the Selection Committee), Institutional players (ADEME, BPI, Île-de-France region), social and solidarity economy actors (La Ruche, the social entrepreneurship chair of the ESSEC business school, the Île-de-France Regional Chamber of Social and Solidarity Economy, L'Atelier Île-de-France).

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SCHEDULE



Means to provide: one full-time equivalent within Paris&Co, annual funding of the platform and startup incubation.

Performance indicators: implementation of the platform, number of startups supported, number of events held in collaboration with the social entrepreneurship community.

Impact indicators: number of economic actors mobilised, number of synergies identified and implemented.

Prospects: in 2020, 15 innovative solutions deployed throughout the territory of Paris and more than 200 innovative companies identified by public buyers and large groups.

ACTION 9

SHARING: ORGANISE SHARING OF PREMISES FOR ACTORS IN THE CIRCULAR ECONOMY AND SOCIAL AND SOLIDARITY ECONOMY

BACKGROUND

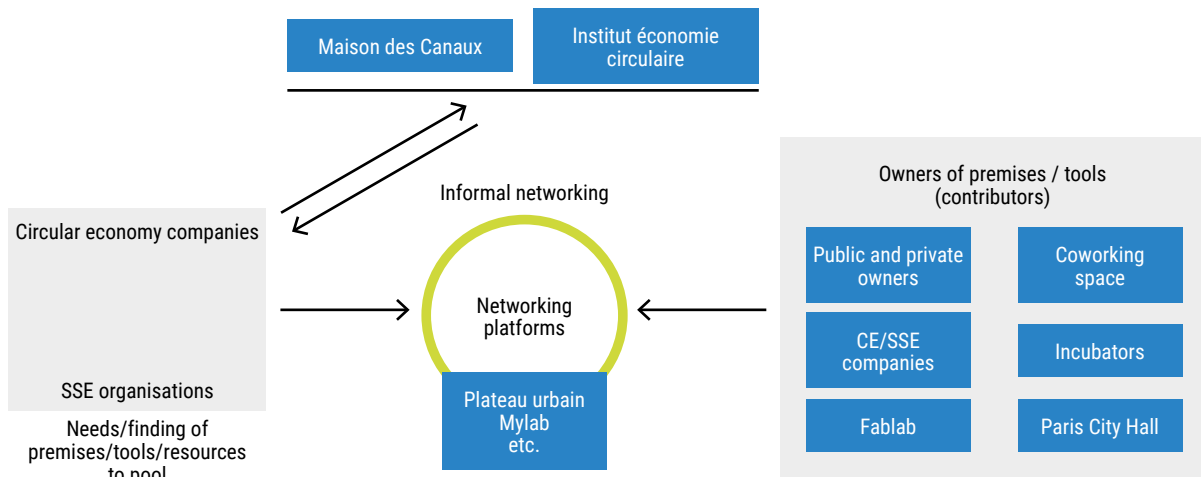
Sharing premises to optimise their occupation is often put forward as a solution to the cost of rent and property pressure in Paris for organisations with low margins, such as organisations in the social and solidarity economy, and for those that are starting up. However, this practice is currently neither widespread nor easy to organise.

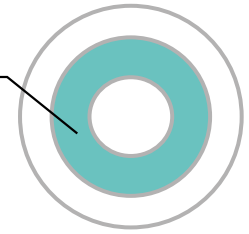
Actors have expressed their logistical needs (refrigerated and non-refrigerated storage space, access to utility vehicles, etc.) and their preference for locations in the inner suburbs or outskirts of Paris, where they can find available properties to set up their premises.

Several premises sharing initiatives exist or are planned in Île-de-France:

- Le PHARES (Hospitality Division for Ecological and Solidarity Advocacy Activities) in Île-Saint-Denis;
- La Chaudronnerie in Montreuil – a residence for societal economies, which will host (for a modest rent) and support companies that are attentive to their production modes and impacts in 2017;
- Confiture Re-Belle, which transforms unsold fruit from supermarkets into jams, shares its premises with the company Baluchon (a creator of jobs for the unemployed) in the former central kitchen of Romainville, as well as a laboratory in collaboration with a school during the summer holidays;
- The non-profit organisation Plateau Urbain offers to occupy vacant premises, in exchange for the payment of charges and taxes. In order to facilitate the networking of projects and premises offered at a low cost, Plateau Urbain forms partnerships with owners (a platform is currently being developed).

MAP OF ACTORS





OPERATIONAL DEPLOYMENT

Identify existing resources and help the emergence of supply:

1. Structure the project by creating a working group involving the City of Paris, social landlords and funders in order to construct a global support programme for investment and operation (toolbox with tenancy or occupancy agreement templates);
2. Make an inventory of supply and demand. Supply (including all related logistical aspects, such as the development of premises) must be able to meet a need. The identification of premises to share will be done according to broad functional categories (commercial, workshops, kitchens, etc.), beginning with "ready-to-use" existing premises, and continuing with "promising" premises that require work or development;
3. Expand the scope of the search tool <http://locaux-bureaux.paris.fr/> which is administered by the City of Paris and its public landlords, or create a dedicated platform if required;
4. Assist the emergence of supply via a communication campaign covering Greater Paris in order to find owners who are unaware of the potential of their premises and interest them in the sharing scheme with a win-win approach;
5. Help potential beneficiaries (circular economy/social and solidarity economy actors) "sell" their projects better by organising networking workshops to link up supply and demand. The eligibility of beneficiaries for the scheme will need to be specified;
6. Promote interim use of premises (schemes such as Grands Voisins, Serpollet).

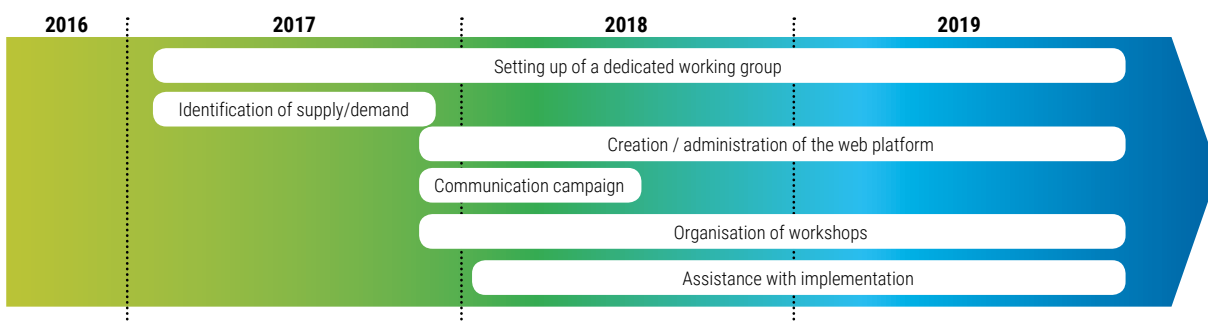
INITIATOR

City of Paris, Department of Economic Attractiveness and Employment (DAE).

Other City of Paris departments involved: Department of Green Spaces and the Environment (DEVE), Department of Sanitation and Water (DPE), Department of Educational Affairs (DASCO), Legal Affairs Department (DAJ), Department of Accommodation and Housing (DLH).

Prospective partners: L'Atelier Île-de-France, Île-de-France Regional Chamber of Social and Solidarity Economy, Inter-Bailleurs (economic interest grouping of landlords), the Caisse des Dépôts group, legal experts, APUR, Plateau Urbain.

SCHEDULE



Means to provide: identification campaign, creation of a digital tool, communication campaign and coordination of the working group and workshops.

Performance indicators: number of meetings of the working group, existence of a support programme and toolbox, availability of the platform (or modification of an existing tool), number of workshops held.

Impact indicators: number of offers on and visitors to the platform, number of projects realised.

Prospects: first make premises owned by the City of Paris available and then extend to include all owners identified.

ACTION 10

PROMOTE AND RAISE AWARENESS: CREATE A PLACE IN PARIS FOR ACTORS OF THE CIRCULAR, SOLIDARITY AND INNOVATIVE ECONOMIES: LES CANAUX

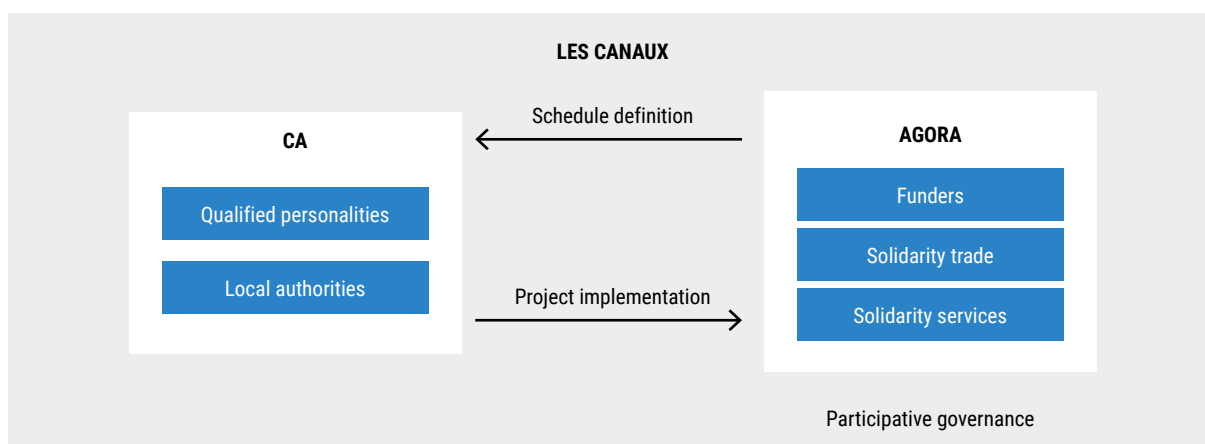
BACKGROUND

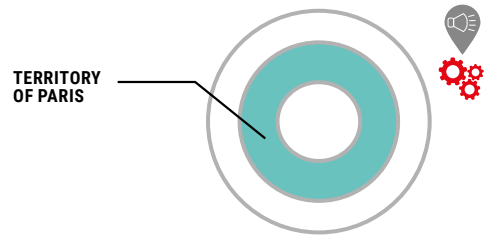
The increasing number of economic actors looking to become engaged in the circular economy, social and solidarity economy, and short supply chains, has led the City of Paris and its partners to propose a place for creation, support and promotion of their projects and initiatives. The aim is to provide solutions and stimulate potential, as well as to be a showcase and a forum for exchanges, pooling and sharing of experiences. It will involve promoting French projects on the international stage and raising awareness among local actors, neighbourhoods and citizens.

This place, known as *Les Canaux*, is being established on the banks of Canal de l'Ourcq, on the doorstep of the town of Pantin and the territory of Est Ensemble and Greater Paris. This territory has been transformed over the past decade thanks to public developments, non-profit actions, entrepreneurial projects and citizen mobilisation.

Les Canaux will host international organisations that support the growth of an inclusive economy engaged in the protection of the planet: the C40 (an organisation that brings together megacities combating climate change) and the Yunus Centre Paris (foundation of Professor Muhammad Yunus, winner of the Nobel Peace Prize). *Les Canaux* will also host an incubator of responsible, ecological and innovative startups, as well as a demonstration area for Parisians, tourists and economic actors to present new products that address social or environmental issues. Events will be held here by actors of the social and solidarity economy and circular economy, administrations, incubators and funders, in order to provide training, assistance and information, and pool the initiatives of all those who want to take action for a more sustainable and responsible world.

MAP OF ACTORS





OPERATIONAL DEPLOYMENT

Les Canaux is located at 6, quai de Seine, in the 19th arrondissement. The project will aim to ensure respect for the principles of the circular and solidarity economy:

1. Renovation of the building in which *Les Canaux* will be located. Works will be conducted in such a way as to reduce CO₂ emissions, reuse materials on-site and produce minimum waste. A steering committee made up of experts will monitor the works and a charter of responsible works will apply to all contractors. Furniture will be made by local actors of the circular and solidarity economy;
2. Setting up of participative governance in order to define the project and its directions in a collaborative and inventive manner. It will be based on an Agora, a consultative body that brings together all those who would like to engage in operation of *Les Canaux* and be involved in the definition of its project and actions;
3. Opening of *Les Canaux*: hosting of international organisations, startups, opening of the temporary shop and organisation of events.

INITIATOR

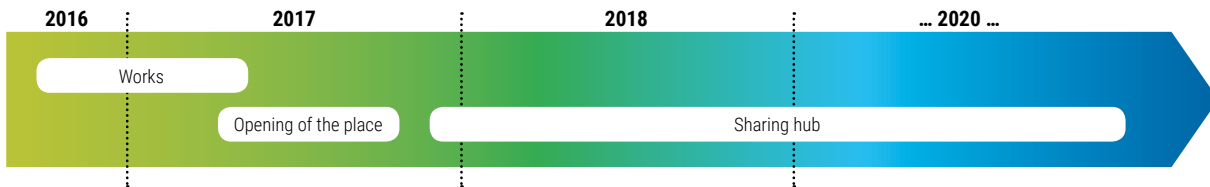
Department of Economic Attractiveness and Employment (DAE).

Other City of Paris departments involved: Department of Accommodation and Housing (DLH), Department of Heritage and Architecture (DPA).

Prospective partners: REFER, Pavillon de l'Arsenal, Ademe, the Metropolis of Greater Paris.

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SCHEDULE



Means to provide: direct investment, financial and logistical support.

Performance indicator: opening and operation of *Les Canaux*, exemplarity of the processes (renovation works, governance).

Impact indicators: number of publications on actors of the circular and solidarity economy, number of international delegations and events hosted, number of participating people.

Prospects: create bridges between all actors of the circular economy and propose a hub for sharing of experiences and mobilisation.

ACTION 11

INTER-COMPANY SYNERGIES: DEVELOP TERRITORIAL SYNERGIES BETWEEN ECONOMIC ACTORS

BACKGROUND

Territorial and industrial ecology, both a scientific field and an area for action, is the study of materials, water and energy flows through industrial systems or territories, and builds strategies to optimise these flows by establishing effective local partnerships. These synergies aim to strengthen the competitiveness of companies, while maintaining local employment, limiting environmental impacts of economic activities within a given geographical area, and adopting a proximity-based strategy. It represents the territorial pillar of the circular economy. Industrial symbiosis (or inter-company synergy) is the practical application of this.

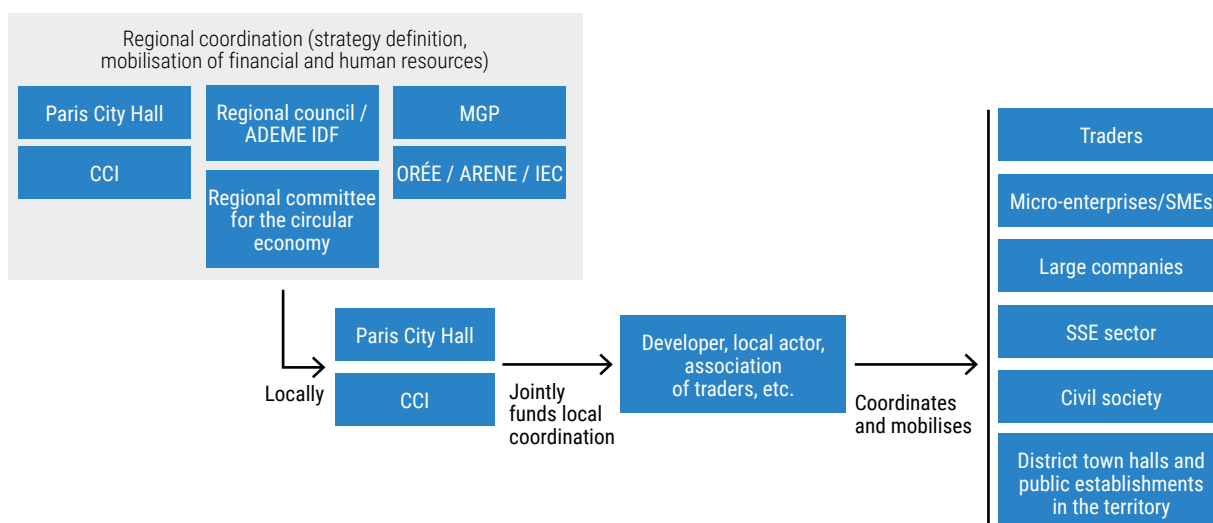
Fifty or so initiatives have currently been referenced in France, with varied levels of progress, and results that are often difficult to measure. A national reference framework was developed in 2016 (managed by ORÉE), which will use indicators to assess and compare the impact of territorial and industrial ecology actions over time.

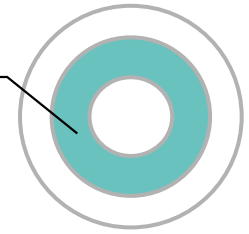
These initiatives are easier to implement when new business and industrial estates are created. In the case of existing business and industrial estates, it is necessary to make inventories of flows and develop partnerships within the area under consider-

ation. ECOPAL in Dunkirk and the Club d'Ecologie Industrielle de l'Aube are currently the most integrated examples in France. In Île-de-France, several initiatives have been launched (Plaine Commune, Cergy-Pontoise, Val d'Orge), but the results are generally little known and they struggle to last due to a lack of management. Within the territory of Paris, no initiatives have yet been referenced as such. Some do exist, but they are based on single flow types (excavated earth, biowaste), rather than business and industrial estates.

From a methodological point of view, territorial and industrial ecology in France is now at a crossroads, with a very top-down approach (territorial analysis, recruitment of actors, assessments of flows, workshops), which has shown its limits in terms of creating synergies with actors reluctant to share data. A new approach inspired by the National Industrial Symbiosis Programme (NISP) method from the UK is currently being tested in France, in order to get territorial and industrial ecology initiatives off the ground directly through workshops involving motivated actors from the outset. The NISP method also stands out for its regional scope of action. This is similar to the Act'IF tool of the French Chambers of Commerce and Industry network, which uses an interactive map to reference flows and resources of companies within a territory, in order to create synergies and boost industries.

MAP OF ACTORS





OPERATIONAL DEPLOYMENT

Provide impetus for pilot projects and deploy them in districts that represent the specificity of Paris' economic fabric:

1. Experiment with a methodology in the pilot district Les Deux Rives: local diagnostics (inventory of stakeholders, mapping, mobilisation strategy, main challenges) followed by coordination of the initiative (assistance and meetings between actors / synergy creation workshops);
2. Identify new sites for deployment of the methodology. Representative sites, districts with a focus on commerce (e.g. Beaugrenelle, Les Halles), tourism (hotels and catering), culture (e.g. La Villette), or a single type of business (e.g. IT/repair in Montgallet);
3. Help form local company associations in charge of local coordination;
4. Jointly fund local coordinator positions over a 3 to 5-year period, with a view to sustainability and self-funding of the position in the long term through earnings achieved (missions: acclimatization of local actors, networking, organisation of events and meetings);
5. Set aside land or facilitate access to land in each district to develop the activities of missing links identified.

INITIATOR

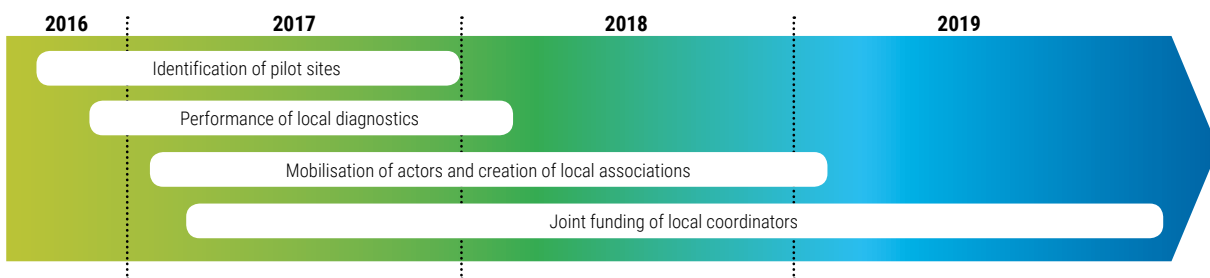
Department of Green Spaces and the Environment (DEVE).

Other City of Paris departments involved: Department of Economic Attractiveness and Employment (DAE), Department of Sanitation and Water (DPE), Urban Planning Department (DU).

Prospective partners: Paris Île-de-France Chamber of Commerce and Industry, Regional committee for the circular economy, Metropolis of Greater Paris, ADEME Île-de-France, trade unions, companies (micro-enterprises, SMEs, large groups, social and solidarity economy).

SCHEDULE

Launch of the first pilot site at the end of 2016



Means to provide: prior studies and reorganisation of teams to coordinate pilot projects.

Performance indicators: number of pilot projects initiated, number of local coordinators recruited.

Impact indicators: number of economic actors mobilised, number of synergies identified / implemented.

Prospects: run a network of local coordinators to communicate in real time on failures and successes, in order to speed up the spreading of good practices

ACTION 12

NETWORK: CREATE AN ONLINE PLATFORM FOR INFORMATION ON THE CIRCULAR ECONOMY

BACKGROUND

During the Greater Paris General Assembly on the Circular Economy, actors within the territory strongly expressed the need to have an online platform dedicated to the local circular economy, as existing platforms address national issues or are developed in other countries. These platforms pursue several aims:

- Spread and share knowledge on the circular economy;
- Offer an area for exchange for circular economy actors, in the form of forums that can be entirely or partially open;
- Promote initiatives and innovations.

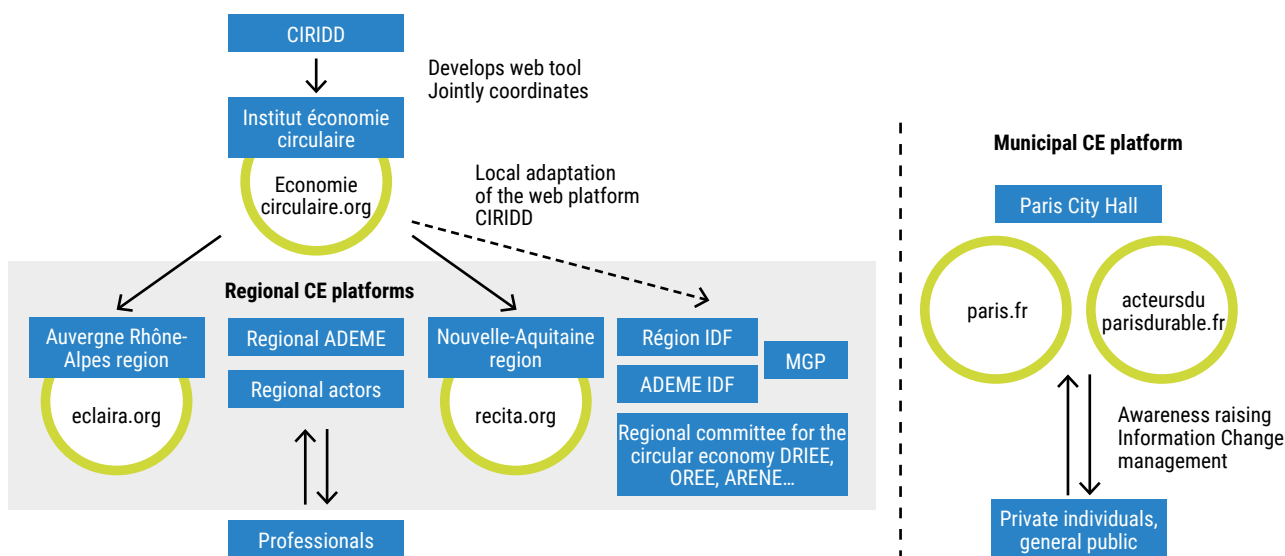
Existing web platforms are currently focussed on specific and different audiences. The Ellen Mac Arthur platform, for example, is focussed on educational actors (secondary and higher education), for which it provides a fun learning area for the sharing of knowledge. The national platform www.economiecirculaire.org developed by the Institut de l'Économie Circulaire and CIRIDD (international resource centre for innovation and sustainable development), is focused on professionals: companies and entrepreneurs in the circular economy. Knowledge exchanged and shared is therefore particularly devoted to the supply side. Several regional platforms have been developed on the basis of this national platform in order to offer a local approach (www.eclaira.org in Auvergne - Rhône-Alpes⁸, www.recita.org in Nouvelle-Aquitaine and www.genie.ch in the canton of Geneva).

Within the framework of the law on New Territorial Organisation of the Republic (NOTRe), the French environment and energy management agency (ADEME) is working with regions to draw up contracts governing regional waste and circular economy targets (CODREC), with an obligation to create waste and circular economy observatories. There is currently little quantitative data (accounting of waste flows, quantification of potential resources, mapping of synergies, etc.) available on web platforms. The setting up of a space for the sharing of quantitative data in the territory could, for example, be developed on online platforms (recommendation of the ADEME-ARF guide for regional circular economy strategies). Among other things, this would make it possible to optimise the use of data and information available from other observatories or online platforms focussed on peripheral topics, such as waste, vulnerability to climate change and greenhouse gas emissions.

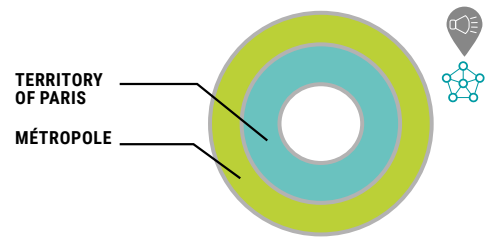
Some key figures produced by the survey submitted to participants at the Greater Paris General Assembly on the Circular Economy (July 2016):

- 51 % use web platforms for network coordination (mainly www.acteursduparisdurable.fr and www.economiecirculaire.org).
- 63 % think that a platform is a useful tool (in combination with other management and promotion tools, such as meetings, visits and newsletters).

MAP OF ACTORS



⁸ Investment of €116 K over a 2-year period, 10 projects supported, 50 feedback reports and 300 news items produced.



OPERATIONAL DEPLOYMENT

Integration of the topic of circular economy in municipal web tools (targeted at the general public) and creation of a dedicated platform for professionals within the metropolitan area:

1. Give more visibility to the circular economy on municipal web tools (paris.fr, jemengage.paris.fr) and develop the Acteurs du Paris Durable (Sustainable Paris Actors) website. The aim is to raise awareness and inform, but also to encourage citizens to get involved (recruitment of volunteers for the Repair Café for example) and manage change;
2. Provide impetus for a metropolitan platform designed for circular economy professionals (in particular those already mobilised as part of the Greater Paris General Assembly on the Circular Economy). This platform will serve as a single entry portal for professionals in the territory, and will identify existing initiatives, actors, resources and tools (materials exchange sites, specific platforms for various sectors, etc.). It will summarise and promote

existing resources in order to give them more visibility; Functions will also include the creation of thematic communities, by geographical area or sector, enabling actors to exchange information and seek advice, expertise and feedback. The platform will also make it possible to highlight innovative startups and speed up their growth; An exhaustive inventory of functions desired by professionals could be performed along with prospective project partners (Metropolis of Greater Paris, ADEME IDF, Comité francilien de l'économie circulaire, etc.);

3. Ensure a high profile for the platform within the territory, with local and sustainable management that establishes tools in the field (events to be organised on a regular basis). Develop complementarity between tools (municipal and metropolitan for example), and establish a dynamic link between target audiences.

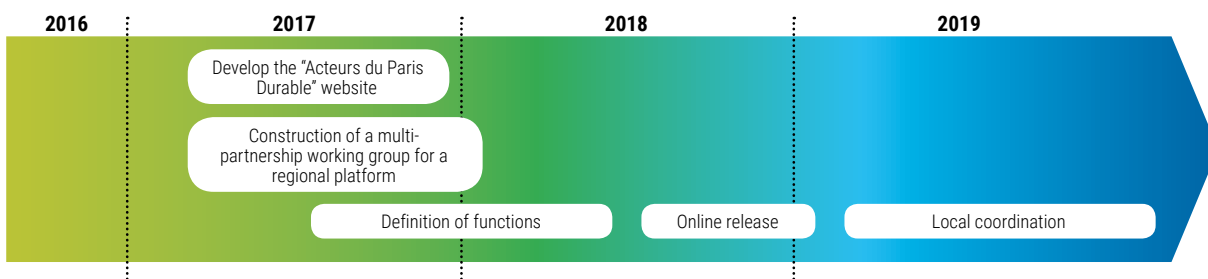
INITIATOR

The Metropolis of Greater Paris and City of Paris for the professional platform.

Other City of Paris departments involved: Department of Economic Attractiveness and Employment (DAE), Department of Information Systems and Technology (DSTI), Department of Green Spaces and the Environment (DEVE).

Prospective partners: Institut de l'Économie Circulaire, Regional committee for the circular economy, ADEME Île-de-France.

SCHEDULE



Means to provide: further development of municipal web tools, creation of the professional platform (tool and human resources to run the platform).

Performance indicators: modification of the Acteurs du Paris Durable (Sustainable Paris Actors) website and creation of a municipal or regional web platform dedicated to the circular economy.

Impact indicators: level of traffic on the platforms.

Prospects: contribute to the construction of a community of circular Metropolises and/or circular Regions.

ACTION 13

SUSTAINABLE PURCHASES: INCREASE THE PROPORTION OF ECODESIGNED PRODUCTS IN PUBLIC PURCHASES AND DEVELOP A FUNCTIONAL ECONOMY APPROACH IN PUBLIC PROCUREMENT CONTRACTS

BACKGROUND

French law No. 2014-856 of the 31st of July 2014 on the social and solidarity economy makes it compulsory for all local authorities with a purchasing budget of 100 million euros or more to adopt a scheme for the promotion of socially responsible public procurement.

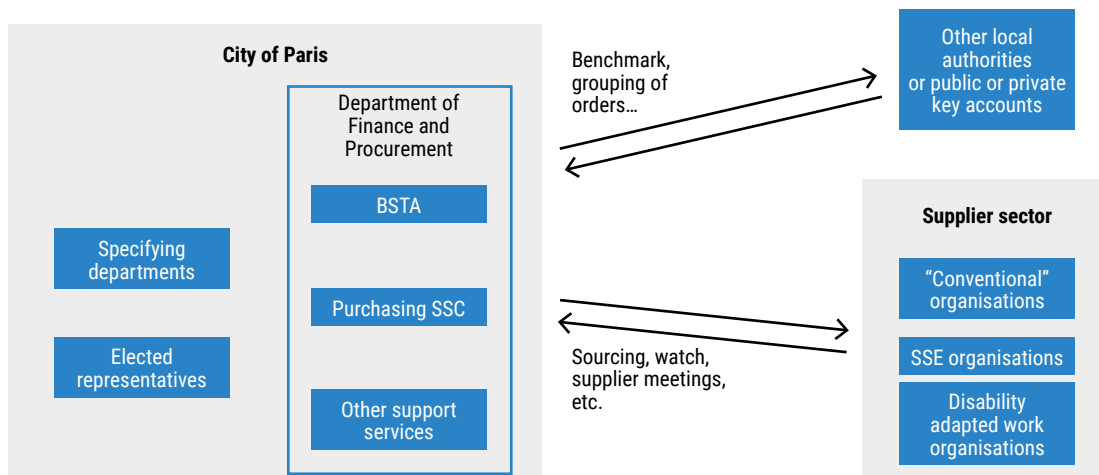
French law No. 2015-992 of the 17th of August 2015 on energy transition for green growth added an environmental dimension to this scheme.

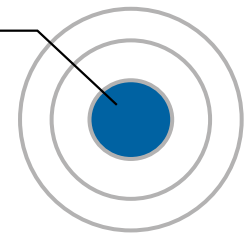
The City of Paris was the first local authority to meet this obligation with the adoption of its responsible public procurement scheme. Adopted unanimously by the Paris City Council meeting

of the 16th of February 2016, it makes the circular economy its cornerstone.

This scheme and the ambitious targets it sets strengthen the circular economy approach that the City of Paris has been committed to for many years, through the use of performance clauses in its procurement contracts related to job market integration and the environment (such as clauses on materials recovery and recycling).

MAP OF ACTORS





OPERATIONAL DEPLOYMENT

1. Systematically integrate considerations conducive to the following actions in purchasing strategies applied by the purchasing branch:
 - Promote the usage and functional economy (favour a mind-set of purchasing of services rather than acquisition by ownership);
 - Take into account the lifecycle analysis in order to better protect/preserve resources (ecodesign) and rationalise costs in terms of the product's lifecycle, as well as its reuse/recycling potential;
 - Combat planned obsolescence;
2. Strengthen benchmarking and cooperation with other major public and private players in the area of the circular economy (sharing of good practices, grouped orders, etc.);
3. Refine knowledge of the offering from suppliers in the circular economy;
4. Encourage better consideration of circular economy challenges by suppliers and contribute to synergies between sectors in order to shape supply;
5. Control implementation of the action by regularly monitoring existing or future indicators.

INITIATOR

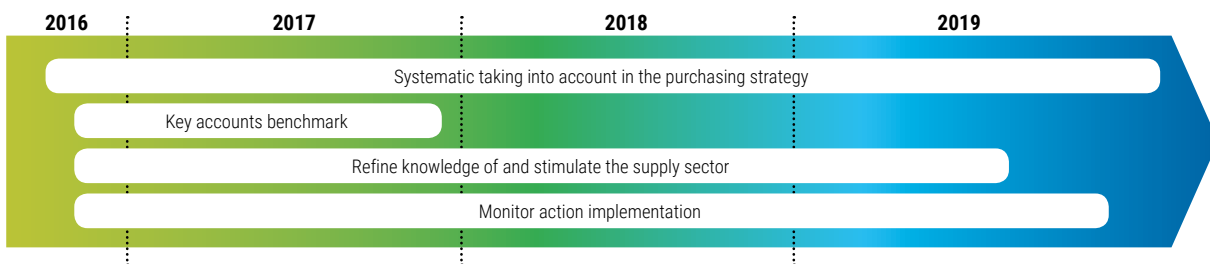
Department of Finance and Procurement (DFA), Department of Economic Attractiveness and Employment (DAE).

Other City of Paris departments involved: all City of Paris departments that produce purchasing specifications.

Prospective partners: Members of the Pact of Greater Paris local authorities for the circular economy, public or private key accounts or local authorities, suppliers.

SCHEDULE

Launched action to be strengthened



Budget elements: fraction of an additional full-time equivalent to the DFA in relation to current resources of the BSTA (Purchasing Techniques and Support Office).

Indicators: Taking into account of current indicators and creation of new indicators.

1. **Main indicators:** percentage of contracts with a circular economy dimension, percentage of contracts with an environmental clause and/or criteria;
2. **Secondary indicators:** percentage of contracts involving eco-materials, percentage of contracts that plan for end-of-life recovery.

ACTION 14

CLOTHING: REFORM OF CLOTHING FOR CITY OF PARIS STAFF, EXTENSION OF USEFUL LIFE AND END-OF-LIFE RECOVERY OF OCCUPATIONAL CLOTHES

BACKGROUND

In 2015, 29,525 City of Paris staff members were given occupational clothing and personal protective equipment (PPE). This represented a total of 404,632 items distributed.

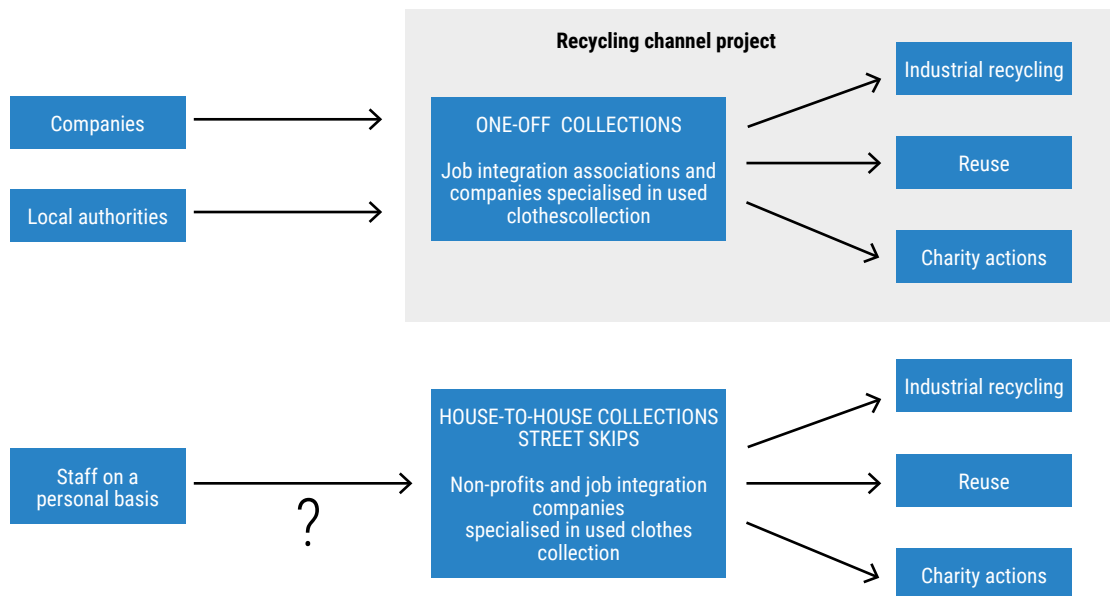
The Department of Property, Logistics and Transport (DILT) has set itself the aim of tracking clothes purchased by the City and is making progress in this area with each contract. One supply contract out of every four is now certified Fairtrade/Max Havelaar and therefore meets requirements in terms of sustainable development and fair trade. Elsewhere, widely distributed items, in particular clothing to protect from the rain and cold, are now sourced from plastic product recycling.

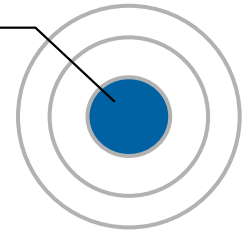
However, there are currently no arrangements made to collect occupational clothing and PPE. It may be that some members of staff use the network of household waste collection points on a voluntary and personal basis, but nothing is provided by the City.

Companies specialised in the recycling of work clothing are few and poorly identified. The recycling channel, whether through charitable actions, reuse or fibre processing, does not yet exist. Certain organisations (La Poste, SNCF) organise collections, but on a very occasional basis.

A study of the technical and financial feasibility of such a recycling channel was launched in June 2016 by the ORÉE association, of which the City is a member. The City is involved in this study and jointly funds it, in partnership with state-owned companies and industrial companies in the textiles industry. If this study is conclusive, it will be followed by a second stage to lay the foundations for an occupational clothing recycling channel. Alongside the setting up of a recycling channel, repair workshops could be created, because the lifecycle of work clothing is often shortened by very occasional damage (such as torn off buttons, faulty zips and snags) which is easily repaired.

MAP OF ACTORS





OPERATIONAL DEPLOYMENT

Set up the collection of old occupational clothing and PPE within the City of Paris and create repair workshops:

1. Continue the partnership with the ORÉE association in order to create a recycling channel, alongside the setting up of one-off collections;
2. With a view to organising one-off collections while awaiting the creation of this channel, identify potential service providers among non-profit organisations and companies providing jobs for the unemployed. Launch the call for proposals;

3. Launch an initial collection campaign in the City's departments during the circular economy week in October 2017;
4. Map out collection sites as close to staff as possible;
5. Adopt the same approach for the repair workshops, in order to identify potential service providers. Identify initiator departments and potential sites.

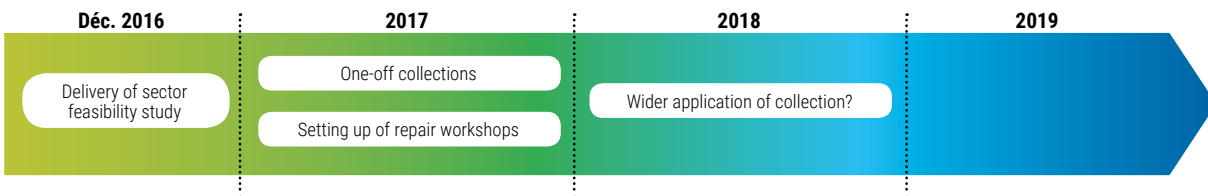
INITIATOR

Department of Property, Logistics and Transport (DILT), Department of Economic Attractiveness and Employment (DAE).

Other City of Paris departments involved: all departments with members of staff provided with occupational clothing and PPE.

Prospective partners: ORÉE, SNCF, La Poste, Ministry of Defence, Ministry of the Interior, etc.

SCHEDULE



Means to provide: €10,000 allocated to co-funding of the ORÉE study; collection and repair services to be assessed according to results of the study.

Performance indicators: setting up of collection points accessible to all members of staff concerned. Opening of repair workshops on several easy-to-access sites.

Impact indicators: clothing recycled per year (in tons). Number of items of clothing repaired per year. Savings made by not replacing items of clothing.

Prospects: empower all members of staff provided with clothing by the City by getting them involved in this clothing repair and recycling action via a network of easy-to-access and sufficiently numerous collection points and repair workshops.

ACTION 15

RESPONSIBLE CONSUMPTION: PROMOTE CIRCULAR CONSUMPTION IN PARIS

BACKGROUND

Responsible consumption refers to all purchasing behaviours that take into account the social and environmental impacts of a product during its lifecycle (production, distribution, use, end-of-life).

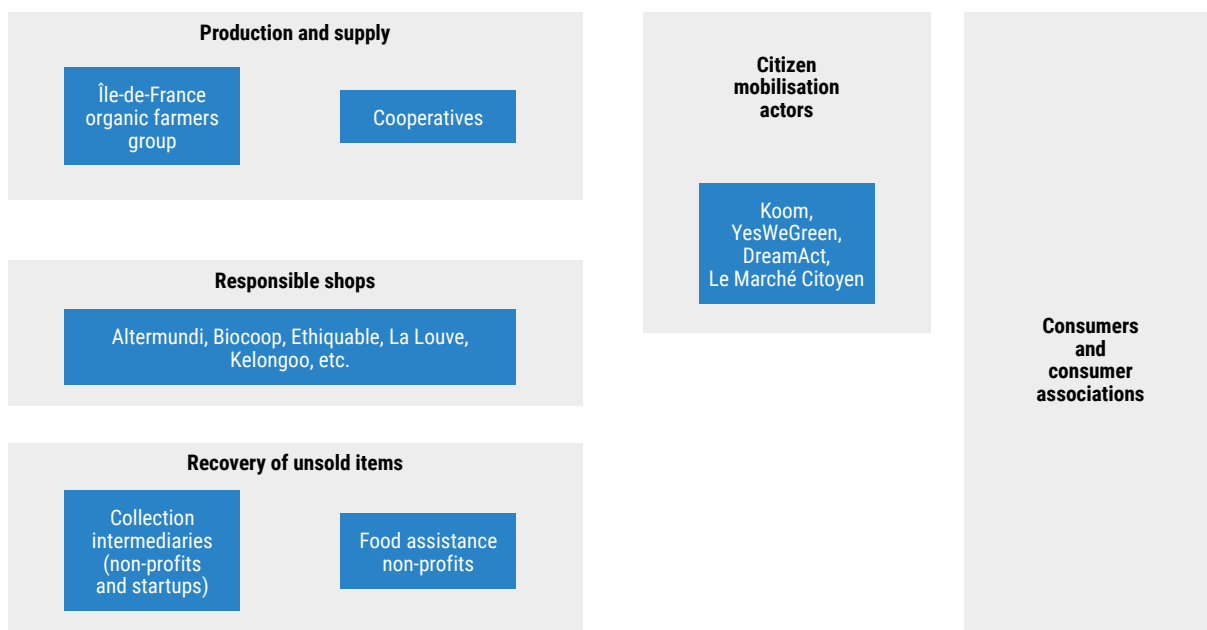
It helps support the local economy and creates jobs, particularly for people suffering long-term unemployment. It also focusses on guaranteeing fair and equitable remuneration for all people involved in the production cycle.

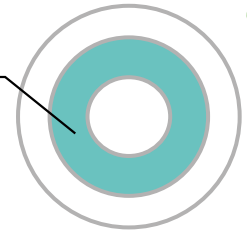
These values also encourage the choice of goods and services from low-pollution production processes, based on short supply chains. They also favour products that require little energy and generate little waste during use, as part of a circular economy approach. Reuse activities are also part of responsible consumption.

The City of Paris promotes the growth of responsible consumption by supporting actors such as the cooperative supermarket La Louve, Kelbongoo, Marché sur l'Eau, Artisans du Monde, Altermundi, etc. Its commitment in this area is also reflected by its involvement in the European project BoostInno, which brings together ten European cities, since 2015.

Elsewhere, at the end of 2015, the Paris City Council also adopted a plan to combat food waste, which is part of more responsible and circular consumption. On average, Parisians throw away thrice as much food still in its packaging than other French people, which represents 59,000 tons of products per year. This plan is based on mobilisation of the administration, in particular municipal and school canteens and municipal food markets, as well as mobilisation of actors in the territory, via actions for the recovery-processing-redistribution of unsold items, the promotion of short supply chains and bulk sale.

MAP OF ACTORS





OPERATIONAL DEPLOYMENT

1. Stepping up implementation of Paris' plan to combat food wastage, in particular through charters for school canteens during the first quarter of 2017 and a call for projects for the processing of unsold food items;
2. Creation of a local group for responsible consumption, as part of the European project BoostInno, including for the resulting awareness-raising initiatives;
3. Support for Solidarité Paris – Campagne projects that are primarily based on new economic models for food;
4. Promotion of innovative, cooperative and solidarity-based economic models for food, or short supply chains, such as La Louve;
5. Support for bulk retail outlets through the finding of premises and assistance with communication.

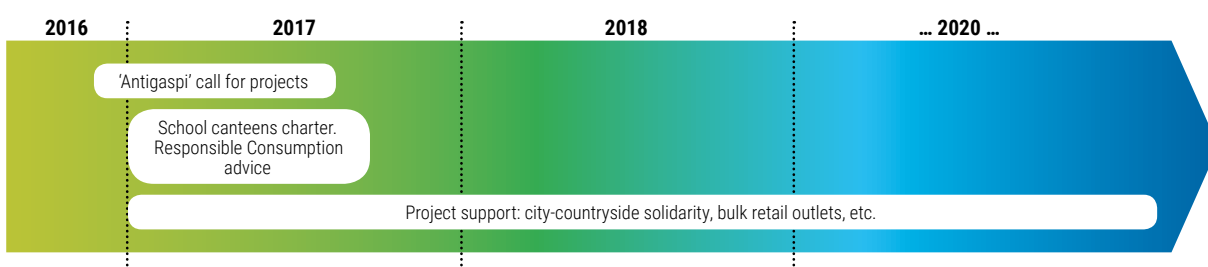
INITIATOR

Department of Economic Attractiveness and Employment (DAE).

Other City of Paris departments involved: Department of Green Spaces and the Environment (DEVE), Department of Sanitation and Water (DPE).

Prospective partners: representatives of the fight against food waste and the Île-de-France agro-food sector (DRIAAF, CCIP, CMAP, SYNHORCAT, ARIA, Chamber of Agriculture, union of Parisian markets, federation of distributors, ANSA, CASINO group, CARREFOUR group, Île-de-France organic farmers group (GAB IdF), network of associations for the maintenance of peasant agriculture (AMAP), French Agency for Food, Environmental and Occupational Health & Safety (ANSES), Île-de-France region, etc.).

SCHEDULE

























Means to be provided: mobilisation of an existing full-time equivalent and strengthening of teams, setting up of the local group for responsible consumption, material and communication support for solidarity-based food organisations.









Performance indicators: number of food recovery-redistribution actions, in particular at markets; number of food processing areas (kitchens, vegetable processing workshops); number of cooperative or short-distribution-channel food retail projects.

Impact indicators: number of tons of food waste avoided, number of jobs created.

Prospects: coordination of the network of actors formed as part of the BoostInno project and anti-waste plan.

PARIS CIRCULAR ECONOMY PLAN: TABLE OF THE 15 ACTIONS IN THE FIRST ROADMAP

Topics	Actions	Initiator	Scale	Target	Impact
	1 Building materials: develop territorial organisation for the recovery and reuse of materials	DEVE DU	Territory of Paris	Pro	
	2 Building sites: diagnosis, sorting and recovery of site resources	DPA	Administration Territory of Paris	Pro	
	3 Circular and sustainable construction: lay the foundations of new economic models	DPA	Administration Territory of Paris	Pro	
 	4 Waste reduction: reduce disposable packaging use	DAE	Territory of Paris	Pro Citizens	
	5 Repair: promote the repairing of objects with a set of complementary initiatives	DAE	Territory of Paris	Pro Citizens	
	6 Reuse: creation of a central municipal workshop for the reuse of building materials	DPA	Administration	Pro	
	7 Re-manufacturing in Paris: develop recycling centres in Paris	DAE	Territory of Paris	Pro Citizens	
	8 Incubator: create an innovation platform for the circular economy	DAE Paris&Co	Territory of Paris	Pro	
	9 Sharing: organise sharing of premises for actors in the circular economy and social and solidarity economy	DAE	Territory of Paris	Pro	
	10 Promote and raise awareness: create a place in Paris for actors of the circular, solidarity and innovative economies: <i>Les Canaux</i>	DAE	Territory of Paris	Pro Citizens	
	11 Inter-company synergies: develop territorial synergies between economic actors	DEVE	Territory of Paris	Pro	
	12 Network: create an online platform for information on the circular economy	MGP	MGP Territory of Paris	Pro	
 	13 Sustainable purchases: increase the proportion of ecodesigned products in public purchases and develop a functional economy approach in public procurement contracts	DFA DAE	Administration	Pro	
	14 Clothing: reform of clothing for City of Paris staff, extension of useful life and end-of-life recovery of occupational clothes	DILT DAE	Administration	Pro	
	15 Responsible consumption: promote circular consumption in Paris	DAE	Territory of Paris	Pro Citizens	

Impact icon	Expected impact
	Material recovery (materials and resources exchanges, repair, reuse, recycling)
	Money saved (€)
	CO ₂ avoided
	Waste reduction
	Networking of actors
	Synergies between actors
	Awareness-raising, information sharing
	Job creation

MAIRIE DE PARIS

DIRECTION DES ESPACES VERTS
ET DE L'ENVIRONNEMENT

AGENCE D'ÉCOLOGIE URBAINE
