





Valérie Pécresse. President of Région Île-de-France

Citizens demand effective regional action.

Our investors demand transparency on the projects they help finance.

We are collectively committed to regional projects being integrated into a green and socially responsible approach, a source of sustainable development for our territories.

That is why Région Île-de-France has decided to resort exclusively to green and responsible loans for its financing needs.

As such, we are very proud that the Region was rewarded, in September 2018, with the most impressive local public issuer award for its green and responsible bond issues on financial markets ("Most Impressive Local Government Green/SRI Bond Issuer"), at the forum of responsible and sustainable capital markets in Amsterdam.

The report, recognized as exemplary by the stakeholders, aims to report on environmentally and socially responsible investment projects that the Region materialises each year.

It presents our most emblematic projects, built and led so as to promote balanced and sustainable development for the regional territory: environmental and social management of the project, in particular contribution to the struggle against global warming.

I am thinking in particular of the construction of the new high schools

focused on bioclimatic design and control of energy, water resources, air quality and acoustics and optimized impact construction sites, as testified by Lycée Lucie Aubrac at Courbevoie, which opened in September 2018. I am also thinking of several other great projects, such as the Vaires-Torcy high-level leisure and sports centre, the Olympic equipment that will host the 2024 Olympic and Paralympic kayaking and rowing events, and the Grand Equipement Documentaire of Aubervilliers, the future reference cluster and centre of a university campus.

Last year, we began a presentation of projects under the United Nations Sustainable Development Goals (SDGs).

This year, we complete this presentation with the impact indicators mentioned in the project files. We are thus making progress in our practices in order to spread a culture of transparency and efficiency of public action.

In this context, I am very honoured that our reaffirmed green and responsible finance policy is once again being rewarded. Indeed, the Region has just received in 2019:

- the sustainability bond of the year award for a local authority, awarded by Environmental Finance;
- and the "Golden Trophy for Public Sector Finance Leaders" awarded by the Leaders League in Paris; for which the jury wanted in particular to highlight Région Île-de-France as the leading European local authencity for green and responsible bond issues.

These prizes reward the performance, transparency and innovation of regional services.

Bolstered by such recognition, we are opening the doors of our new headquarters in Saint-Ouen to host in July 2019 a major conference on sustainable finance as a lever for responsible and renewed territorial public action. The Region is actively involved in structuring green and responsible finance in the local public sector.

Finally, I would like to thank the many investors from France. Europe and elsewhere who, once again, were so many to respond to the funding for a stronger and more environmentally-friendly Région Île-de-France.

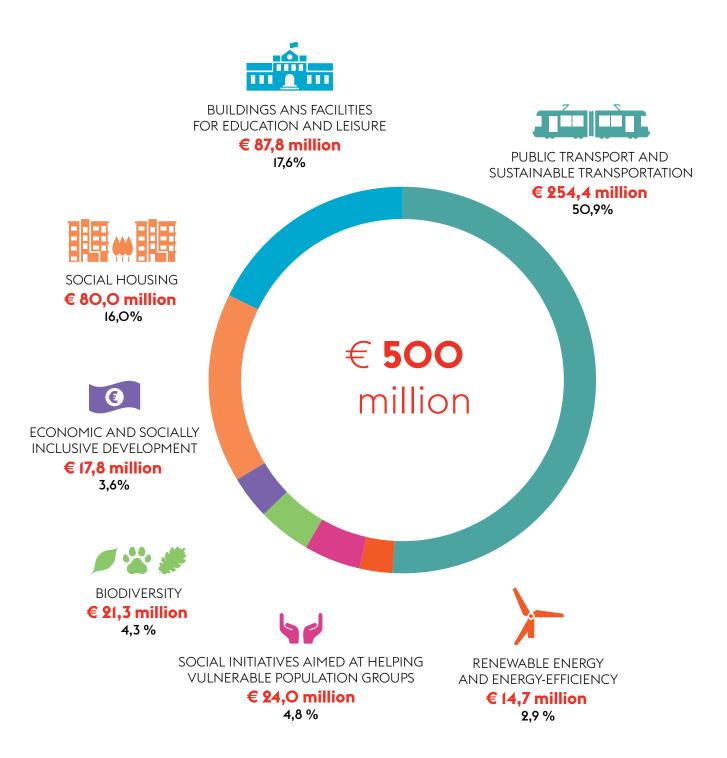
With us, they support positive and sustainable finance in the Paris financial marketplace.



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# 2018 Green and sustainability bond



Projects financed by the green and sustainability bond 2018

sustainability bond 2018	Rising €M	Allocation rate	
	500	100 %	
BUILDINGS AND FACILITIES FOR EDUCATION AND LEISURE	87.8	17.6 %	p.17
Projects: construction of new high schools  Boulogne-Billancourt high school  Lucie Aubrac high school - Courbevoie  Emily Brontë high school - Lognes  Projects: renovation of high schools	38.0 5.2 8.5 24.4 13.1	7.6 %	p.18 p.20 p.22
Alexandre Denis high school - Cerny  Projects: construction for higher education  Ecole des Hautes Etudes en Sciences Sociales, Campus Condorcet - Aubervilliers  Grand Equipement Documentaire (library), Campus Condorcet - Aubervilliers  Bibliothèque de Documentation Internationale Contemporaine (library), La Contemporaine - Nanterre	13.1 27.8 5.3 20.5 1.5	5.6 %	p.24 p.26 p.28 p.30
Conservatoire National des Arts et Métiers (CNAM), Landy 2 - Saint-Denis  Project: construction of a sports complex of regional interest  Leisure and sport centre - Vaires-Torcy	0.5 <b>8.9</b> 8.9	1.8 %	p.32 p.34
PUBLIC TRANSPORT AND SUSTAINABLE TRANSPORTATION	254.4	50.9 %	p.37
Projects: subways Subway line 4 Subway line 11 Subway line 14 Projects: tramways	124.8 31.7 73.6 19.5 53.5	25.0 % 10.7 %	p.38 p.40 p.42
Tramway line T4 Tramway line T9 Tramway line T11 (north tangential) Tramway line T12 Projects: railway links	13.1 10.0 15.5 14.8 <b>35.1</b>	7.0 %	p.44 p.46 p.48 p.50
EOLE Line P (Paris-Troyes)  Scheme: development for buses on own sites and layout of roadways  T ZEN 4 (from Viry-Châtillon to Corbeil-Essonnes)  Scheme: master plan for accessibility	34.3 0.8 <b>21.3</b> 4.0	4.3 %	p.52 p.54 p.56
Railway station of Saint-Denis	2.0	3.7 70	p.58
RENEWABLE ENERGY AND ENERGY-EFFICIENCY	14.7	2.9 %	p.61
Scheme: energy policy and transversal actions Geothermal energy at La Courneuve	<b>14.7</b> 1.1	2.9 %	p.62
BIODIVERSITY	21.3	4.3 %	p.65
Scheme: acquisition and development by the Green Spaces Agency  La Tégéval  Scheme: protection of biodiversity, water policy and transversal actions  Marne riverbank - Thorigny-sur-Marne and Dampmart	16.9 1.8 4.4 0.3	3.4 % 0.9 %	p.66 p.68
SOCIAL INITIATIVES AIMED AT HELPING VULNERABLE POPULATION GROUPS	24.0	4.8 %	p.71
Scheme: support for social actions L'ESPOIR Medico-Educational Institue - L'Île-Adam	<b>24.0</b> 0.8	4.8%	p.72
SOCIAL HOUSING	80.0	16.0 %	p.75
Scheme: support for social housing Social housing - Neuilly-sur-Marne Social and student residence - Vanves	<b>80.0</b> 0.3 1.1	16.0 %	p.76 p.78
ECONOMIC AND SOCIALLY INCLUSIVE DEVELOPMENT	17.8	3.6 %	p.81
Schemes: support for research and innovation Support to scientific investment (Major domain of interest & SESAME) Schemes: support for social and solidary economics Support to business creation (Entrepreneur # Leader)	14.5 14.5 3.3 0.3	2.9% 0.7 %	p.82 p.84

# PRESENTATION OF RÉGION ÎLE-DE-FRANCE

As a leading French local authority. Région Île-de-France manages a budget of € 5 billion, the highest amongst French regions. Over half of its budget is devoted to long term investment, promoting regional dynamism and attractiveness.

The Region plays a key role to promote sustainable development initiatives on the territory. It is the competent authority setting strategic quidelines of local public actions on the territory: territorial development, transports using Île-de-France Mobilités, economic development, research and innovation, climate and energy, biodiversity, waste management. Today, the Region is spending € 2bn on its ecological transformation (47% of the budget for the year). Investment is the spearhead for the foundation of a sustainable regional ecosystem. In the 2019 budget, capital expenditure exceeds operating expenditure by volume for the first time.

#### An ambitious environmental roadmap

As part of its actions, the Region has drawn up a cross-sectorial and resolutely territorial environmental roadmap that irrigates all regional policies:

- Transport: environmental objective of reducing greenhouse gas emissions related to transport and mobility.
- New regional strategy for economic development, innovation and internationalization, which integrates the environmental challenge in order to meet the two-fold objective of identifying potentialities in terms of economic activity, employment and innovation, and improvement of the living environment of Parisians,
- Continuing territorialisation of the regional environmental policy, in order to inject new dynamics in favour of the environment as part of the development projects of the Île-de-France communities. The new "One hundred innovative and ecological neighbourhoods" scheme launched in 2016 illustrates this move,
- Repositioning of support for thematic research networks (major area of interest), targeting in particular the major issues in terms of climate, energy, and resources,
- High environmental requirements, with the adoption of various plans over the last three years, such as the "Let's Change Air" and "Zero Waste" plans as of 2016, but also the "Green", "Anti-Jams" and "Cycling" plans in 2017, and the establishment in 2018 of an Energy-Climate strategy that will focus on innovation and the development of renewable energies,
- Support for organic farming in Île-de-France and short circuits with the adoption in 2017 of the "Regional Strategy for Forest and Wood" and, in 2018, the "Regional Strategy for the Development of Forest and Wood Biosourced Materials and Products Channels"
- Starting in 2017, integration of an environmental premium in subsidies to social housing, for the most successful programs (eco-materials, Positive energy building 'BEPOS').

# Several exemplary actions concerning the functioning of the institution

The Region is committed to integrate sustainable development and social responsibility in all its activities across the different fields. As such, it sets the example in terms of governance and policies implemented for the territory and regarding its own practices.

As part of its active policy for gender equality and the fight against violence against women (designated as the Great Regional Cause for 2017), the Region has been the signatory with 5 trade unions of a framework agreement in 2017 on professional equality between men and women.

In October 2017, in order to promote union commitment by recognizing the skills of union representatives, the Region, with five out of seven union organizations (representing 72% of the staff in my Region), signed a Charter of Recognition of the Trade Union Pathway in career development and professional improvement.

In March 2019, the Region also adopted a framework agreement for better public service effectiveness through quality of life at the workplace, autonomy and empowerment. Thus, by continuing its modernization, the Region is committed through several mechanisms to promoting freedom in the organization of work (telecommuting, flexible working hours), while remaining focused on protecting its agents and becoming a pioneering administration in the recognition of the right to disconnect.

Beyond that, in order to make public procurement more responsible and accessible, the Region decided in 2016 to redesign its purchasing policy after participating in the creation of the Maximilien platform that brought together all the Île-de-France public procurement markets. In March 2019, it committed to a labelling process for its purchases by 2020 based on compliance with the commitments made in the Small Business Act, the signing of the Responsible Supplier Relations and Purchasing Charter, and the adoption of the new redesigned pattern for the promotion of responsible purchasing.

# A commitment that is confirmed by external evaluations

The Region enjoys excellent credit quality, equivalent to the rating of the French National State, that allows it to intervene in the long term on its territory under the best conditions. It is currently rated AA2, with a positive outlook, by Moody's and AA, with a stable outlook, by Fitch.

In early 2019, Fitch set up a new international rating methodology for local authorities, giving them an intrinsic score, which is no longer capped by that of the State (standalone credit profile). Région Île-de-France is today the only French Region among those monitored by the agency which has an intrinsic 'AA+' rating, higher than that of the State ('AA').

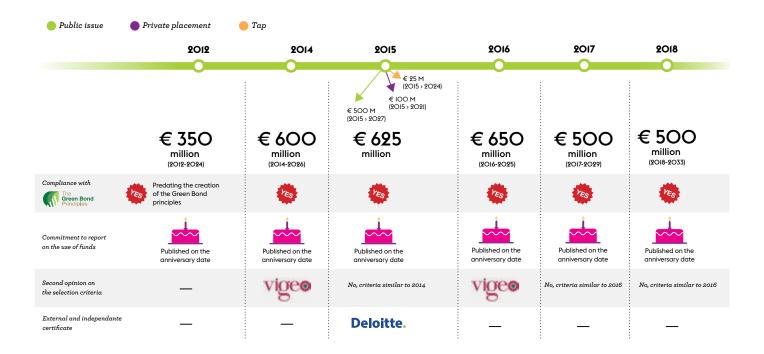
Extra-financial performances of Région Île-de-France in environmental, social and governance matters (ESG) are recognized. Evaluated by the VIGEO Agency since 2009, the Region's overall performance is classified in 2018 as "advanced", with an overall rating of 63/100. The Region is classified as being at an "advanced" stage as a whole (see below).

# A REGULAR ISSUER ON THE GREEN BOND MARKET

Région Île-de-France is a frequent and regular issuer in the green bond market. It has raised € 3.2 billion through the green and sustainability bonds issued between 2012 and 2018, through eight transactions including six new public benchmarks. This amount represents 72% of the total amount of borrowings mobilized by the Region during this period.

The green and sustainability transactions launched by the Region are in line with the Green Bond Guidelines, and respond to both Green Bond Principles and Social Bond Principles. They are intended to implement the best practices, e.g. by requesting a third opinion on the reporting published in 2015, or through the use of an updated second opinion on Region's commitments in 2016. The green and sustainability framework established by Région Île-de-France is described hereafter.

# HISTORY OF GREEN AND SUSTAINABILITY BONDS COMPLETED BY THE REGION AND OF COMMITMENTS MADE



#### **Recent awards:**

Région Île-de-France has been awarded several trophies for its green and responsible financial strategy:

#### Gold Trophy of the leaders of public finance

This award, received in April 2019, rewards the daily commitment of all the Region's employees, who serve an economical and ambitious management. The jury highlighted in particular:

- the Region's desire to make Île-de-France a leading European community for green and responsible bond issues. Indeed, it is the 1st territorial authority in Europe to have launched bond issues, accompanied by an exemplary annual report;
- the sharp decline in regional spending. In total, a total of more than € 1 billion have been saved since 2015 on operating expenses, thus making it possible to finance new investments. In 2019, capital expenditures will now exceed the operating expenses by volume;
- the ambitious and proactive "purchasing" policy, the last manifestation of which is the new territorial purchasing centre, allowing the pooling of purchasing resources and expertise for the benefit of its stakeholders (high schools, associated organizations, other local authorities, etc.).

#### • 1st position on the European panel of local authorities for the Vigeo rating agency

The social and environmental rating agency Vigeo Eiris has ranked Région Île-de-France 1st among the European panel of local authorities for the year 2018. In its latest report, the agency estimated that the Region's performance is at an "advanced" stage in the six areas analysed considered as a whole (environment, human resources, human rights, territorial development and solidarity, public procurement and governance).

#### Annual Environmental Finance Award for its latest green and responsible bond issue

In March 2019, Région Île-de-France received the annual Environmental Finance Award for its latest green and responsible bond issue as a local authority.

## Most Impressive Local Public Issuer award

In September 2018, the Region received the Most Impressive Local Public Issuer award for its green and responsible bond issues on the financial markets ("Most Impressive Local Government Green/SRI Bond Issue"), during the responsible and sustainable capital markets forum of Amsterdam.

# GREEN AND SUSTAINABILITY BOND FRAMEWORK OF RÉGION ÎLE-DE-FRANCE

Green and sustainability operations launched by the Region are in line with the Green Bond Principles and the Social Bond Principles; with the aim to implement best practices in the marketplace.

# Commitment on the use of proceeds towards 7 categories of projects

Buildings and facilities for education and leisure	Construction and renovation of buildings in accordance with a sustainable development approach that contributes to protecting the environment, and to making them accessible to persons with reduced mobility.
Public transport and sustainable transportation	Developing the public transport offering as an alternative to the use of cars, thereby contributing to sustainable transportation and combating climate change, and projects aimed at improving the comfort, accessibility and security of the individuals who use the transport systems and of the individuals living near the infrastructure.
Renewable Energy and Energy-Efficiency	Projects that contribute to the development of renewable energy and energy-efficiency.
Biodiversity	Projects that contribute to protecting biodiversity, natural environments and landscapes, and to developing green spaces.
Social initiatives aimed at assisting vulnerable population groups	Increasing the accommodation capacity, and projects aimed at improving access to buildings and infrastructure for vulnerable population groups (persons with reduced mobility, the elderly, and vulnerable individuals).
Social Housing	Projects aimed at developing and renovating the social housing stock, which fulfil environmental and social requirements and contribute to access to housing and improving the occupants' comfort levels.
Economic and socially inclusive development	Projects that contribute to creating or maintaining local jobs, through supporting regional SMEs, and projects in the social and socially inclusive economy; Supporting research and innovation by SMEs that promote an environmentally-friendly and social regional transition process, and the Region's attractiveness.

# Nine eligibility criteria in relation to the purpose and management of the project

The projects' environmental Environmental management and eco-design of the projects responsibility Combating climate change and promoting the Region's environmental transition Sustainable regional planning and improving quality of life The projects' social and societal Socially inclusive development, combating inequality, and promoting responsibility the safety of individuals 5. Respect for fundamental rights 6. Responsible regional development The projects' economic Regional economic development responsibility Fair practices, responsible purchasing and responsible supplier relations Governance Consultation with stakeholders

# Use of proceeds reporting (on the issue's anniversary date)

Reporting published by Région Île-de-France is intended to illustrate the fulfilment of commitments made to each transaction. in terms of allocation of funds, compliance with the eligibility criteria, and presentation of transversal impact indicators.

# Transparency on management of proceeds and on the process of allocation and selection

#### 1/Management of proceeds:

Regarding financial flows, proceeds of the loan are fungible in the regional treasury. The French local authorities are required to deposit their balance of cash in a single account at the French Treasury.

Regarding accounting and budgetary management, borrowings are subject to an entry for investment earnings and are used to cover capital expenditures of the same year. This principle of budgetary annuality is applicable to French local authorities, and is offering a guarantee to investors that the funds raised by the green and sustainability loans will be used in full in the year of the loan's mobilization for the financing of the Region's investment projects.

## 2/Process of allocation and selection of projects:

It begins after the end of the year of mobilization of the bonds concerned, when the Region has a perfect view of the level of investment expenditures on each project.

The Finance Directorate, which directs the preparation of the reporting, asks each of the Region's directorates to select a number of investment projects:

- First, the directorates must identify projects that correspond to an amount of expenses recorded in the relevant year, and that meet the eligibility criteria for the green and sustainability loan, among those that are most exemplary in this regard. The Region's directorates that support the projects are in the best position to select the most emblematic projects in their portfolio.
- Second, the management control and information system department verifies the expenditures on each project, together with each respective directorate. The Finance Directorate defines then the allocation breakdown based on project proposed.

Once this stage is completed, each respective directorate prepares the reporting on the set of selected projects. The information obtained by each department is then centralized within the finance department, which consolidates the document and verifies the overall consistency. The document is then sent to the communication department for design and printing.

# **KEY FACTS ON THE 2018 REPORTING**

The report presented this year on the projects financed by the 2018 green and responsible bond issue contains the same level and as demanding information as that presented last year, detailing:

- A summary table on the allocation of funds towards projects / schemes financed,
- A summary table of three transversal impact indicators identified; creation of jobs supported by the project (on the worksite and during the project's operation), CO2 savings provided by the project, and number of beneficiaries of the project, including a methodology notice presenting each methodology used to calculate the impact indicators for each project presented in this reporting,
- A factsheet on each project financed, with a presentation of the project, its lifecycle, and an eligibility criteria grid illustrating with the help of a selection of probative elements how each project indeed meets every eligibility criteria. Each header describes main information about the project; it aims to better distinguish between new projects and those that have been renewed, and for the latter, a history of the funds allocation, for the previous green and sustainability bonds issued by the Region, is presented.

Like last year, an example project is presented for each scheme benefiting from the funds mobilised, the programmes covering a multitude of small projects. In addition, this report proposes looking at the projects financed by the 2018 green and sustainability bond from the perspective of the Sustainable Development Goals established by the United Nations:

- The Sustainable Development Goals to which each project responds are identified as such in the header of each project sheet.
- A summary table is presented to provide an overview of the contribution of each project to each of the goals; the approach
  used to construct this table is presented in the methodological approach.
- The 2018 edition supplements the summary presentation of the SDGs made in 2017 through the link with the impact indicators mentioned in the project sheets.
- This approach shows that, on average, each project contributes positively and directly to 8.5 UN Sustainable Development
  Goals compared to a subset of twelve Sustainable Development Goals that can potentially be applied directly to investment
  projects financed by the 2018<sup>1</sup> green and sustainability bond.

Pi	Process regarding 2018 reporting						
End-february 2019	Launch of the allocation and project selection process.						
March-April 2019	Consultation with the relevant directorate to identify a set of eligible projects.						
April 2019	First projected project selection by the Finance directorate.						
Avril-May 2019	Verification of the amount of expense of each project by the Management Control and Information Systems directorate.						
End April- May 2019	Each relevant directorate prepares reporting on the identified projects, showing how each project is consistent with each eligibility criteria, and filling up a grid of impact indicators, specifying the methodology followed.						
Mid-may 2019	Consolidation, harmonisation and consistency checks are carried out by the finance department on all the information generated.						
may-June 2019	Formatting of the report.						
June 11 2019	Publication of the report.						

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Projects and examples of schemes presented and financed by the 2018 green and sustainability bond

62 %

Rollover rate of projects and schemes compared to last year reporting

10

New projects and examples of schemes having benefited from 2018 green and sustainability funds

8,5

Average number of United Nations Sustainable Development Goals to which each funded project/scheme contributes directly

# Summary of the projects' impacts and footprint of the 2018 green and sustainability bond

	Purpose of the project
BUILDINGS AND FACILITIES FOR EDUCATION AND LEISURE	
Projects: construction of new high schools	
Boulogne-Billancourt high school	Construction of a new high school
Lucie Aubrac high school - Courbevoie	Construction of a new high school
Emily Brontë high school - Lognes NEW PROJECT	Construction of a new high school
Projects: renovation of high schools	-
Alexandre Denis high school - Cerny	Restructuring and expansion of the high school
Projects: construction for higher education	
Ecole des Hautes Etudes en Sciences Sociales, Campus Condorcet - Aubervilliers	New construction
Grand Equipement Documentaire (library), Campus Condorcet - Aubervilliers	New construction
	New construction
Bibliothèque de Documentation Internationale Contemporaine (library) - Nanterre	New construction
Conservatoire National des Arts et Métiers (CNAM), Landy 2 - Saint-Denis	
Project: construction of a sports complex of regional interest	New construction, renovation and development of the site
Leisure and sport centre - Vaires-Torcy	linew construction, removation and development of the site
PUBLIC TRANSPORT AND SUSTAINABLE TRANSPORTATION	
Projects: subways	
Subway line 4	Extension to Bagneux (phase 2)
Subway line 11	Extension to Rosny-Bois-Perrier
Subway line 14	Extension to mairie de Saint-Ouen
Projects: tramways	Extension to mame de Samt-Oden
Tramway line T4	New branch between Bondy and Montfermeil
Tramway ligne T9	New line between Paris and Orly ville
Tramway line T11 (north tangential)	New tramway-train line between Epinay and Le Bourget (Phase 1)
· · · · · · · · · · · · · · · · · · ·	
Tramway line T12 Projects: railway links	New line between Massy-Palaiseau and Evry Courcouronnes
EOLE	West extension of the RER E
Line P (Paris-Troyes)	Electrification of the railway line between Paris and Troyes
Scheme: development for buses on own sites and layout of roadways	N 15 1 1 1/2 CLASSIL 10 1 3 5
T ZEN 4 (from Viry-Châtillon to Corbeil-Essonnes)  NEW PROJECT	New line between Viry-Châtillon and Corbeil-Essonnes
Scheme: master plan for accessibility	
Railway station of Saint-Denis	Accessibility of the train station
RENEWABLE ENERGY AND ENERGY-EFFICIENCY	
Scheme: energy policy and transversal actions	
Geothermal energy at La Courneuve NEW PROJECT	Creation of the heating network and connection to the network
BIODIVERSITY	
Scheme: acquisition and development by the Green Spaces Agency	
La Tégéval NEW PROJECT	Creation of a green belt over 20 kilometres
Scheme: protection of biodiversity, water policy and transversal actions	
Marne riverbank - Thorigny-sur-Marne and Dampmart	Reconstitution of the Marne riverbank's ecological continuity
	·
SOCIAL INITIATIVES AIMED AT HELPING VULNERABLE POPULATION GROUPS	
Scheme: support for social actions  L'ESPOIR Medico-Educational Institue - L'Île-Adam  NEW PROJECT	Rehabilitation works of the institute
L ESPOIR Medico-Educational Institue - L lie-Addill	Renabilitation works of the institute
SOCIAL HOUSING	
Scheme: support for social housing	
Social housing - Neuilly-sur-Marne NEW PROJECT	Construction of 117 new housing units
Social and student residence - Vanves NEW PROJECT	Construction of 2 residents for students (60 housing units) and
	for young workers (67 housing units)
ECONOMIC AND SOCIALLY INCLUSIVE DEVELOPMENT	
Schemes: support for research and innovation	
Support to scientific investment ( Major domain of interest & SESAME)	Support strategic investments on innovative research projects
Schemes: support for social and solidary economics	
Support to business creation (Entrepreneur # Leader)	Special loans and regional premiums coupled to the ADIE
	micro-credit/France Active

	Impacts of the	projects presente	d	Footprint of the	-			
Total project cost (1)	CO2 avoided (teq/year) by the project	FTEs supported by the projects*	Number of beneficiaries of the project	Allocated amount (2)	Weight (2) / (1)	ability bonds alloc CO2 avoided (teq/ year)	FTEs supported	Perimeter covered by impact indicators
39.0	84	10	800	5.2	13.3 %	11.2	1.3	100 %
53.6	38	11	1,500	8.5	15.9 %	6	1.7	100 %
40.0	6	73	1,015	24.4	61.0 %	4	45	100 %
41.8	117	10	1,179	13.1	31.3 %	37	3	100 %
38.8	24	101	16,966	5.3	13.7 %	3	14	100 %
102.3	285	245	30,950	20.5	20.0 %	57	49	100 %
29.5	-	87	11,450	1.5	5.1 %	-	4	100 %
33.3	10	89	801	0.5	1.5 %	О	1	100 %
90.0	-	133	564,000	8.9	9.9 %	-	13	100 %
307.1	570	2,180	755,800	31.7	10.3 %	59	225	100 %
1.298.0	3,255	9,216	331,000	73.6	5.7 %	185	523	100 %
1.380.0	7,310	9,798	176,000	19.5	1.4 %	103	138	100 %
	,,,,,,	,,,,,	,					
255.8	-	1 816	62,000	13.1	5.1 %	-	93	100 %
403.3	1338	2,863	70,000	10.0	2.5 %	33	71	100 %
610.9	20,700	4,337	65,800	15.5	2.5 %	525	110	100 %
576.7	2,534	4,095	40,000	14.8	2.6 %	65	105	100 %
3.740.9	8,040	26,554	1,400,000	34.3	0.9 %	74	243	100 %
320.0	50,000	2,272	4,400,000	0.8	0.3 %	125	6	100 %
320.0	30,000	2,2,2	4,400,000	0.0	0.5 70	123	· ·	100 70
124.0	-	880	47,000	4.0	3.2 %	-	28	19 %
		447	22.222	2.0	7.10		4-7	10.04
65.5	-	413	90,000	2.0	3.1 %	-	13	10 %
7.5	2,270	53	17,701	1.1	14.8 %	335	8	8 %
60.0	_	_	90,000	1.8	3.0 %	_	_	11 %
4.3	-	-	102,090	0.3	7 %	-	-	6 %
3.5	-	-	80	0.8	22.9 %	-	-	3 %
18.6	_	148	311	0.3	1.6 %	_	2	<1 %
12.3	_	84	153	1.1	8.9 %	_	8	1%
12.3		3.	103		3.7 %		J	1 70
44.5				4.5	400.04			100.04
14.5	-	-	74	14.5	100.0 %	-	-	100 %
0.7								
0.3			2,862	0.3	100.0 %			10 %
	_	_	2,002	0.3	100.0 %		_	10 70

# Reading funded projects from the point of view of UN Sustainable Development Goals

# Methodological approach

The process followed was formalised as follows:

✓On the one hand, the projects were assessed against twelve objectives out of seventeen. Indeed, goals N°2, 5, 16 and 17 ("Zero Hunger", "Gender Equality", "Peace, Justice and Strong Institutions" and "Partnerships for the Goals") focus more on the social responsibility of the Region as an institution, than on the nature of the investment projects financed under the green and sustainable bond issue program. Given the geographical

situation of Île-de-France, goal N°14 "Life below water - conserving and sustainably exploiting oceans, seas and marine resources" does not concern any project in the Paris region (the preservation and restoration of fresh water and wetland ecosystems fall within the scope of **goal N°15**.

✓On the other hand, some sustainable development goals apply uniformly to all projects eligible for green and sustainable bond, given the project eligibility criteria grid that has been established by the Region (green columns). Thus, each eligible project contributes to the reduction of inequalities and therefore to the struggle against poverty (goals N°1 and 10), economic growth

	1 NO POVERTY	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	6 CLEAN WATER AND SANITATION
	Ŵŧŧŧ	<b>-</b> ₩ <b>•</b>		Å
Boulogne-Billancourt high school	•		•	•
Lucie Aubrac high school – Courbevoie	•		•	•
Emily Brontë high school - Lognes	•		•	•
Alexandre Denis high school - Cerny	•		•	•
Ecole des Hautes Etudes en Sciences Sociales, Campus Condorcet - Aubervilliers	•		•	
Grand Equipement Documentaire (library), Campus Condorcet - Aubervilliers	•		•	
Bibliothèque de Documentation Internationale Contemporaine (library) - Nanterre	•		•	•
Conservatoire National des Arts et Métiers (CNAM) - Landy 2 - Saint-Denis	•		•	•
Leisure and sport centre - Vaires-Torcy	•		•	•
Subway line 4	•			•
Subway line 11	•			
Subway line 14	•			
Tramway line T4	•			
Tramway line T9	•			
Tramway line T11 (north tangential)	•			•
Tramway line T12	•			•
EOLE	•			
Line P (Paris-Troyes)	•			
T ZEN 4 (from Viry-Châtillon to Corbeil-Essonnes)	•			
Railway station of Saint-Denis	•			
Geothermal energy - La Courneuve	•			•
La Tégéval	•			•
Marne riverbank - Thorigny-sur-Marne and Dampmart	•			•
L'ESPOIR Medico-Educational Institue - L'Île-Adam	•	•	•	•
Social housing - Neuilly-sur-Marne	•			
Social and student residence - Vanves	•			
Support to scientific investment (Major domain of interest & SESAME)	•	•		•
Support to business creation (Entrepreneur # Leader)	•			

(goal N°8), responsible production (goal N°12), sustainable development of cities and territories (goal N°11), and the fight against climate change (goal N°13, with the exception of the support scheme for business creation).

✓ The contribution of each project to the remaining goals (goals N°3, 4, 6, 7, 9, and 15) is evaluated on a case by case basis, according to the specificity of each project as described in the sheets accompanying this reporting.

✓With regard to goal N°3 "Good health and well-being", the United Nations scope is essentially concerned with the field

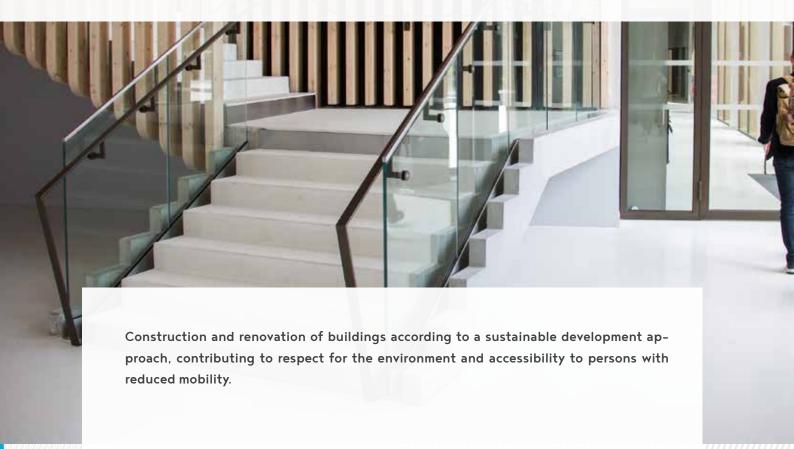
of public health. This definition was used to evaluate the contribution of projects to the goal; the elements contained in the reporting relating to well-being in the sense of improving the quality of life have therefore not been taken into account. Only two investment projects respond directly to public health issues within the meaning of goal N°3, the Region intervening in this field mainly by operating through the management of health and social training.

 $\checkmark$ For each project, the main sustainable development goal is identified by a double circle: **(a)** 

7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMAT ACTION	15 LIFE AND LAND	MAIN SDG'S IMPACT INDICATORS	
•	•		•	•	•	•		Number of beneficiaries	page 18
•	•		•	•	•	•		Number of beneficiaries	page 20
•	•		•	•	•	•		Number of beneficiaries	page 22
•	•		•	•	•	•		Number of beneficiaries	page 24
•	•		•	•	•	•		Number of beneficiaries	page 26
•	•		•	•	•	•		Number of beneficiaries	page 28
•	•		•	•	•	•		Number of beneficiaries	page 30
•	•		•	•	•	•		Number of beneficiaries	page 32
•	•		•	•	•	•	•	Number of beneficiaries	page 34
•	•	•	•	•	•	•		CO2 avoided by the project	page 38
•	•	•	•	•	•	•		CO2 avoided by the project	page 40
•	•	•	•	•	•	•		CO2 avoided by the project	page 42
•	•	•	•	•	•	•	•	Number of beneficiaries	page 44
•	•	•	•	•	•	•		CO2 avoided by the project	page 46
•	•	•	•	•	•	•		CO2 avoided by the project	page 48
•	•	•	•	•	•	•		CO2 avoided by the project	page 50
•	•	•	•	•	•	•		CO2 avoided by the project	page 52
•	•	•	•	•	•	•	•	CO2 avoided by the project	page 54
•	•	•	•	•	•	•		Number of beneficiaries	page 56
•	•	•	•	•	•	•		Achieving accessibility	page 58
•	•		•	•	•	•		CO2 avoided by the project	page 62
	•		•	•	•	•	•	Preservation of the ecological continuity	page 66
	•		•	•	•	•	•	Preservation of the ecological continuity	page 68
•	•		•	•	•	•		Number of beneficiaries	page 72
•	•		•	•	•	•		Number of beneficiaries	page 76
•	•		•	•	•	•		Number of beneficiaries	page 78
•	•	•	•	•	•	•		Number of beneficiaries	page 82
	•		•	•	•			Number of beneficiaries	page 84



# BUILDINGS AND FACILITIES FOR EDUCATION AND LEISURE



The Region has adopted a new programme of investment for high schools, in consultation with the local education authorities and communities in Région Île-de-France. Resources devoted to secondary education have doubled in order to reflect demographic changes and new school dynamics: 90,000 additional high school students are expected in Île-de-France between 2012 and 2030, reflecting the dynamics of the territory.

The priority environmental objectives for new upcoming construction projects will focus on bioclimatic design and energy management; site biodiversity and water resources; air quality and acoustics; construction methods and optimised site impacts; specific maintenance and waste management.

- Development of sectorial guidelines for sustainable management, which are regional guides to include concerns in matters of sustainable development in the projects.
- Region's jurisdiction: mandatory for the high schools; projects in the framework of State-Region relations in the field of higher education.
- Forms of intervention:
  - High schools: procurement contracts for contracting authority / contracting authority representation,
  - Higher education: subsidy or direct contracting work,
  - Leisure islands: direct contracting work (regional properties).
- Target audience: pupils, students, teachers, researchers / amateur and professional athletes.

# **BOULOGNE-BILLANCOURT HIGH SCHOOL**

Projects: construction of new high schools















Title				Construction of a new high school			
Locations			Boulogne-	Billancourt			
Key dates				2015 prime contractor's competition, studies and invitation for tenders for 2016, construction completed, opening September 2018.			
Total project cost			€ 39.0 mi	€ 39.0 million			
Financing by the Region in the total amount of the project				100.0%			
2018 financing by the green and sustainable	ility bond		€ 5.2 milli	€ 5.2 million			
History of project financing by previous gree	en and responsible	e regional borrov	ving				
	2014	2015 € 2.5 M	2016 € 10.7 M	2017 € 17.8 M	2018 € 5.2 M		

# ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- "Construction of a new high school with a capacity of 800 students.
- A key competence of the Region, which manages the Île-de-France high schools and as such exercises an essential responsibility for Îlede-France youth and their families.
- •HQE® certification process and "Zero Energy" objective, with connection to the local network favourable to renewable energy.
- Equipment in an urban area undergoing transformation in the Concerted development zone (ZAC: Zone d'aménagement concertée) of the Trapèze: Eco-neighbourhood on the emblematic site of former Renault factories, linking up between the Seine and the urban core.

#### ▶ PROJECT LIFECYCLE

- •The year 2018 made it possible to complete the construction, in particular with the finalization of all the technical batches (heating-venting, electricity) and the second-work (partitioning, finishing), as well as outdoor facilities.
- Specific facilities related to environmental quality are in place: photovoltaic panels, green roof and rainwater recovery. Maintenance monitoring of the local production of photovoltaic electricity is provided by the SIPPEREC (Île-de-France organisation that has renewable energy expertise).
- •The school was commissioned in September 2018 to welcome high school students for the start of the new school year. The finalization of the HQE® and BEPOS audits is underway.

# ► IMPACT INDICATORS FOR THE PROJECT

Indicator	Impact	Methodological note
Social inclusion FTEs supported by the project	10 FTEs	В
Number of beneficiaries of the project	800	D-1
CO2 avoided by the project	84 CO2 teq/year	E-1



Environmental management and eco-design	<ul> <li>"HQE® certification approach.</li> <li>"Specifications defining the environmental requirements for investment in the high schools.</li> <li>"Worksite with minimal environmental disturbances" charter with all waste traceability objectives and a minimum recovery requirement of 70%.</li> <li>"Environmental monitoring of each phase by a specialist contracting authority assistant.</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>"Zero Energy" target: energy production on site will provide the equivalent of the needs related to regulatory uses not covered by renewable energy (BEPOS label).</li> <li>"Installation of photovoltaic panels on the roof.</li> <li>"Alternative rainwater management with green roofing, a rainwater collection, and discharge towards the urban valley of the ZAC (development zone).</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Despite a limited urban site, looking for green roofing to limit the waterproofing and contribute to the mitigation of urban heat island effect in the summer.</li> <li>Reinforcement period envisaged in the works contract with maintenance without any phytosanitary product in order to avoid any pollution of the runoff water.</li> <li>Compact building on the plot, favourable to the building inertia and its place in a built-up environment.</li> <li>Maintenance of the historical pediment of the Renault factories reinstalled in the new main facade of the future high school, as urban sign on the access area.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	Access for disabled people.
Respect for fundamental rights	Combating social, educational and regional inequalities.
Responsible regional development	<ul> <li>Provision of general and technological education.</li> <li>International section and preparatory class for the Grandes Écoles.</li> <li>Reduction of the post-baccalaureate territorial imbalances.</li> </ul>
Regional economic development	<ul> <li>Supporting employment during construction, supporting integration employment and recruiting welcoming, maintenance, catering and accommodation staff within the school.</li> </ul>
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Application of the Public Procurement Code by the project officer.</li> <li>Requirements on the choice of construction products (to save on natural resources).</li> </ul>
Consultation with stakeholders	<ul> <li>Information and consultation procedure extended to the entire school community.</li> <li>Public meetings during the major phases of the operation.</li> </ul>

# LUCIE AUBRAC HIGH SCHOOL

# Projects: construction of new high schools















Purpose			Constr	uction of a new	high school		
Locations				evoie			
				Competitive tender for project management: 2014; Surveys : 2015; Public tender for worksite : 2016 ; construction completed; opening September 2018			
Total project cost				€ 53.6 million			
Financing by the Region in the total amount of the project				100.0%			
2018 financing by the green and sustainal	bility bond		€ 8.5 r	€ 8.5 million			
History of project financing by previous gr	een and respons	ible regional bor	rowing				
	2014	2015	2016	2017	2018		
		-	-	€ 23.1 M	€ 8.5 M		

#### ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- Construction of a new high school to meet the demographic needs of the sector.
- A key skill of the Region, which manages high schools in the Paris region and is therefore a vital responsibility for young Île-de-France inhabitants and their families.
- •HQE® certification process, with the objective of the BEPOS energy label, and the use of renewable energy.
- •Implementation of the instructions of the River Police related to the flood zone, near the Seine.
- Compact 5-level frame design around an atrium, creating a common living space at the centre of the property.

#### ► PROJECT LIFECYCLE

- The work was carried out at a sustained pace in 2018 to meet highly constrained deadlines, and to allow an opening to the students in the fall.
- All exterior structures have been completed, including the bike garage, the landscaped water retention nets, and the composting area.
- •The consequent photovoltaic facility is completed, mainly with the roof panels of the school, whose production is resold to the grid. In addition, the modules inserted into the atrium canopy and placed on the staff housing produce self-consumed electricity.
- •The finalization of the HQE® and BEPOS audits is underway.

## ► IMPACT INDICATORS FOR THE PROJECT

Indicator	Impact	Methodological note
Social inclusion FTEs supported by the project	11 FTEs	В
Number of beneficiaries of the project	1,500	D-1
CO2 avoided by the project	38 CO2 teq/year	E-1



Environmental management and eco-design	<ul> <li>HQE® certification approach.</li> <li>Specifications defining the environmental requirements for investment in the high schools.</li> <li>"Worksite with minimal environmental disturbances" charter with all waste traceability objectives and a minimum recovery requirement of 70%.</li> <li>Environmental monitoring of each phase by a specialist contracting authority assistant.</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>"Zero Energy" target: energy production on site will provide the equivalent of the needs related to regulatory uses not covered by renewable energy (BEPOS label).</li> <li>Photovoltaic plant on the roof providing the production of electricity, partly for own use, and partly sold to the mains: panels on the high school and housing units, supplemented by modules inserted into the canopy of the atrium.</li> <li>Production of domestic hot water of the housing by installation of thermal solar panels on the roof.</li> <li>High efficiency gas boiler completed with cogeneration to allow additional on-site electricity production.</li> <li>Recovery of rainwater on the roof, to directly supply the student toilets and the outdoor spaces, to reduce the use of the town's water.</li> <li>Alternative water management with landscaped channels and on-site retention, to limit and delay flows into the water mains. This is to limit the size of public works, avoid overflows during storms, and reduce volumes handled.</li> <li>Plant diversity, with non-allergenic species requiring little maintenance and water: reinforcement period specified in the works contract without use of any phytosanitary product.</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Roofs with a range of vegetation ensuring a diversity of plants and substrates, to develop and enrich the biodiversity of the site, and limit the waterproofing of the plot and the effects of urban heat island.</li> <li>Compact design of the building around an atrium creating a core for the establishment, and providing an additional, protected living space available to the entire school community.</li> <li>Inclusion in the site meeting all the requirements of the flood zone linked to the Seine. Arrangements mode with the River Police to ensure the safety of property and people as well as water transparency: absence of clam where the water rises and possibility of storage of flood waters on site, to limit its potential effects in the neighbourhood.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	Access for disabled people.
Respect for fundamental rights	Combating social, educational and regional inequalities.
Responsible regional development	<ul> <li>Courses that provide a diversified and quality training offering in the region.</li> <li>In addition to general education units, it is planned to host a technological STMG (Science and Technology Management) course, as well as an international section, with a post-GCSE level preparatory class for the Grandes Écoles.</li> </ul>
Regional economic development	<ul> <li>Supporting employment during construction, supporting integration employment and recruiting welcoming, maintenance, catering and accommodation staff within the school.</li> </ul>
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Application of the Public Procurement Code by the project officer.</li> <li>Requirements on the choice of construction products (to save on natural resources).</li> </ul>
Consultation with stakeholders	<ul> <li>Information and consultation procedure extended to the entire school community.</li> <li>Public meetings during the major phases of the operation.</li> </ul>

# EMILIE BRONTË HIGH SCHOOL



# Construction of a new high school















Subcategory	construction of a new high school
Locations	Lognes
Key dates	2015 project management competition, studies and tender for 2017, work in progress, opening August 2019
Total project cost	€ 40 million
Financing by the Region in the total amount of the project	100.0%
2018 financing by the green and sustainability bond	€ 24.4 million

#### **▶** QUALITATIVE PRESENTATION OF THE PROJECT

- Construction of a new high school with a capacity of 1,015 students.
- A key skill of the Region, which manages high schools in the Paris and is therefore a vital responsibility for young Région Île-de-France inhabitants and their families.
- •HQE® certification process, with the objective of the BEPOS energy label, and the use of renewable energy.
- •The future Emily BRONTE high school intended to host 1,015 students is located in the district of the former ZAC Mandinet, along the Cours des lacs in the town of Lognes.
- •The plot is part of a mixed residential fabric consisting of individual and collective housing and some equipment.

#### ▶ PROJECT LIFECYCLE

- After a notification of works in August 2017, the construction began in September 2017 with six companies awarded technical macrobatches.
- •This year, the construction site made it possible to carry out the structural work. All the buildings of the operation are undergoing indoor fitting out (flooring, painting, ceiling installation)
- •Outdoor facilities are being fitted out for finalization end of August 2019
- •The commissioning is planned for the summer of 2019, with plans to host students for the next school year.

# ► IMPACT INDICATORS FOR THE PROJECT

Indicator	Impact	Methodological note
Social inclusion FTEs supported by the project	73 FTEs	В
Number of beneficiaries of the project	1,015	D-1
CO2 avoided by the project	84 CO2 teq/year	E-1



Environmental management and eco-design	<ul> <li>HQE® certification procedure with an energy label for the Lycée part.</li> <li>Specifications defining the environmental requirements for investment in the high schools.</li> <li>"Worksite with minimal environmental disturbances" charter with all waste traceability objectives and a minimum recovery requirement of 70%.</li> <li>Environmental monitoring of each phase by a specialist contracting authority assistant.</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Zero Energy" target: energy production on site will provide the equivalent of the needs related to regulatory uses not covered by renewable energy (BEPOS label).</li> <li>Photovoltaic plant on the roof providing the production of electricity, partly for own use, and partly sold to the mains.</li> <li>Rejection of rainwater from the site towards pits in the heart of the high school courtyard</li> <li>Taking into account of the sorting of waste generated by the activity and sorting system at the source and composters set up to reuse the bio-waste.</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Project in line with the urban pattern; in other words, construction built along the course of lakes with the design of a high environmental quality building taking into account the constraints and assets of the site.</li> <li>Period for the reinforcement of the planted areas contemplated in the works contract with maintenance not using any plant health product in order to avoid any pollution of runoff water.</li> <li>Implantation of the building set back from the plot boundary to minimize damage and ensure sustainability and ease of maintenance.</li> <li>Qualitative treatment of landscaped areas organized around main areas and giving the project a clear perception.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	Access for disabled people.
Respect for fundamental rights	Combating social, educational and regional inequalities.
Responsible regional development	<ul> <li>Provision of general and technological education.</li> <li>Most of the teaching: general education stream and two technological sections (STL biotechnology and STMG)</li> </ul>
Regional economic development	Supporting employment during construction, supporting integration employment and recruiting welcoming, maintenance, catering and accommodation staff within the school.
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Application of the Public Procurement Code by the project officer.</li> <li>Requirements on the choice of construction products (to save on natural resources).</li> </ul>
Consultation with stakeholders	<ul> <li>Information and consultation procedure extended to the entire school community.</li> <li>Public meetings during the major phases of the operation.</li> </ul>
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# **ALEXANDRE DENIS HIGH SCHOOL**

# Projects: renovation of high schools















Purpose			Restr	ucturing and ex	pansion of the hi	gh school		
Locations			Cerny	Cerny				
Key dates			Comp	Competitive tender for project management: 2014; Surveys : 2015-2016;				
			Publi	c tender for wor	ksite : 2017; Wor	ksite in pro	ogress.	
Total project cost			€ 41.	€ 41.8 million				
Financing by the Region in the total amount of the project			100.0	100.0%				
2018 financing by the green and sustainability bond			€ 13.	€ 13.1 million				
History of project financing by previous g	reen and respons	sible regional bo	rrowing					
	2014	2015	2016	2017	2018			
	<del>-</del>	<del>-</del>	<del>-</del>	<del>-</del>	<del></del>			
				€ 6.3 M	€ 13.1 M			

# **▶ QUALITATIVE PRESENTATION OF THE PROJECT**

- Establishment located in a small rural Essonne town, on a large 17 acre site bordering the wooded Montmirault Park. It mainly hosts vocational courses in automotive maintenance and logistics, but also in aeronautics, which benefit from the proximity of the La Ferté-Alais airfield.
- •The operation consists of completely renovating the vocational training buildings, rebuilding the staff housing, and creating general education facilities to upgrade the training to a multi-purpose facility.
- Considering the size of the site and its heavy vegetation, a landscape revaluation will also be implemented on most of the property.
- Creation of a biomass boiler, which will supply all buildings on the site with renewable energy. It will also be supplied by the local production of wood located in the Gâtinais Regional Park.

#### ► PROJECT LIFECYCLE

- •The staff housing has been completed and was delivered by the end of 2018.
- •The work of the first phase for the restructuring and extension of the high school is underway and will be completed in September 2019.
- •The structural work for the wood boiler has already been completed and the technical facilities are being installed for operation in the winter of 2019.

# ► IMPACT INDICATORS FOR THE PROJECT

Indicator	Impact	Methodological note	
Social inclusion FTEs supported by the project	10 FTEs	В	
Number of beneficiaries of the project	1,179	D-1	
CO2 avoided by the project	117 CO2 teq/year	E-1	



Environmental management and eco-design	<ul> <li>Specifications defining the environmental requirements for investment in the high schools.</li> <li>"Worksite with minimal environmental disturbances" charter with all waste traceability objectives and a minimum recovery requirement of 70%.</li> <li>Environmental monitoring of each phase by a specialist contracting authority assistant.</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Production of domestic hot water for the houses by installation of solar thermal panels on the roof (supplemented by the gas boiler).</li> <li>Low consumption goal.</li> <li>Recovery of rainwater on the roof, for local watering, cleaning outdoor areas, as well as the sanitary block of the new building. These uses will reduce the consumption of city water, and contribute to the slowing rainwater runoff.</li> <li>Creation of a wood boiler for the benefit of the entire site, including for existing high school buildings that were not rebuilt.</li> <li>Recommending a short circuit biomass supply by local industry, in coordination with the Gâtinais Regional Park, which supports this platform.</li> <li>Alternative water management with a goal of zero discharge of rainwater to the mains, thus maximum delivery and retention on site.</li> <li>Parking in honeycombed slabs with grass and gravel filling to limit water proofing.</li> <li>Runoff directed to ditches to naturally purify residual hydrocarbons.</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Roofs entirely covered in vegetation (except workshops and part residential), in order to integrate as much as possible in the vegetation. The roofs of the new building will have semi-intensive vegetation, while the greening of the restructured buildings will be extensive, to limit the overload on the existing structure. This is to ensure the overall qualitative treatment of the whole, while having reasonable maintenance.</li> <li>Take into account the different levels on the site.</li> <li>Use of the earth as insulation, especially at the north ground level next to the gym.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	Access for disabled people.
Respect for fundamental rights	Combating social, educational and regional inequalities.
Responsible regional development	<ul> <li>Streams contributing to provide diversified and quality training in the region</li> <li>High school focused on professional courses, with a strong specialisation in the aeronautics trades, in connection with the nearby La Ferté-Alais airfield.</li> <li>This will allow for general second cycle courses ensuring the institution's range of choices, as well as the redeployment of the aeronautical stream with the creation of a specialized BTS technical diploma.</li> <li>Availability of an internship on the site ensures wide geographical recruitment of students.</li> </ul>
Regional economic development	<ul> <li>Supporting employment during construction, supporting integration employment and recruiting welcoming, maintenance, catering and accommodation staff within the school.</li> </ul>
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Application of the Public Procurement Code by the project officer.</li> <li>Requirements on the choice of construction products (to save on natural resources).</li> </ul>
Consultation with stakeholders	<ul> <li>Information and consultation procedure extended to the entire school community.</li> <li>Public meetings during the major phases of the operation.</li> </ul>
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# ÉCOLE DES HAUTES ÉTUDES EN SCIENCES SOCIALES - CAMPUS CONDORCET

Projects: construction for higher education













Campus Condorcet - Aubervilliers			
Work in Progress - Delivery planned in the 3rd quarter of 2020.			
€ 38.8 million			
100.0%			
€ 5.3 million			
ng			
2016 2017 2018			
- C13M C53M			

# ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- •The construction of the EHESS (Ecole des Hautes Etudes en Sciences Sociales) research building is carried out by Région Île-de-France, which is responsible for project management and 100% financing. Like the GED library (Grand Espace Documentaire), this work is an integral part of the Condorcet Campus development project, led by the Public Institution for Scientific Cooperation.
- •The Pierre-Louis Faloci architectural firm has been appointed the prime contractor for the carrying out surveys and monitoring this work. The building, with 8,760 m² of floor space, is on seven levels. It has a triangular shape, which follows the contours of the ground and goes around a patio.
- •The project accommodates eight research centres, including, for example, the Centre for India and South Asia Studies, and the China-Korea-Japan Research Centre. The building will house more than 900 people, researchers, PhD students and administrative staff.

#### ► PROJECT LIFECYCLE

- ·Work in progress.
- •At this stage: soil consolidation completed, foundations and earthworks in progress.
- •Upcoming: construction of the stakes.

#### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	101 FTEs	A-1
Social inclusion FTEs supported by the project	6 FTEs	В
Number of beneficiaries of the project	16,966	D-11
CO2 avoided by the project	24 CO2 teq/year	E-2



Environmental management and eco-design	<ul> <li>Assistance to the contracting authority for the development and monitoring of the environmental program since the scheduling until 2 years after the building's delivery.</li> <li>Extended environmental commitment: grey energy, indoor air quality, autonomy in natural lighting, bio-sourced materials.</li> <li>Green worksite charter limiting the nuisances.</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Ambition in the energy field beyond regulatory obligations, i.e. the search for the "Effinergie+" level, which represents a 20% reduction in consumption.</li> <li>Non-polluting and low-emitting materials used in VOC (volatile organic compounds), high use of wood from sustainably managed forests (126,000 dm3 or 13 dm3 / m2).</li> <li>No air conditioning but natural night ventilation.</li> <li>Heavy presence of vegetation with the development of 700 m2 of green spaces, 1000 m2 of green roofs on 30 cm of earth, to effectively combat heat islands.</li> <li>Project located near the "Front Populaire" underground station.</li> </ul>
Sustainable regional planning and improving quality of life	Regional rebalancing in the field of higher education and research.
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>Achievement of 17,000 hours of insertion (equivalent to 6 full-time jobs).</li> <li>Allocation of works contracts to facilitate access to public procurement for SMEs.</li> </ul>
Respect for fundamental rights	<ul> <li>Improving the working conditions of doctoral students by offering them dedicated space.</li> </ul>
Responsible regional development	Implementation of integration jobs.
Regional economic development	Creation of 101 FTEs for the construction phase.
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Requirements on the choice of construction products (to save on natural resources, on CO2 emissions).</li> <li>Requirements concerning the origin of materials (limitation on grey energy).</li> </ul>
Consultation with stakeholders	<ul> <li>Permanent consultation with future users (EHESS) and local authorities.</li> <li>Information for residents on the development of the Campus, via local authorities and the Campus Condorcet Public Institution.</li> </ul>

# GRAND EQUIPEMENT DOCUMENTAIRE (LIBRARY) - CAMPUS CONDORCET















# Projects: construction for higher education

Purpose			New consti	ruction		
Locations			Campus Co	ondorcet - Aube	ervilliers	
Key dates			Work in Pro	ogress - Deliver	y planned in the 2	nd quarter of 2020
Total project cost			€ 102.3 mi	Illion		
Financing by the Region in the total amount of	the project		100.0%			
2018 financing by the green and sustainability	bond		€ 20.5 mil	lion		
History of project financing by previous green	and responsible r	egional borrow	ving			
	2014	2015	2016	2017	2018	
				€ 3.3 M	€ 20.5 M	

#### **▶ QUALITATIVE PRESENTATION OF THE PROJECT**

- The construction of the GED library (Grand Equipement Documentaire) is carried out by Région Île-de-France, which is responsible for project management and 100% financing. Like the EHESS, this is an integral part of the development project of the Condorcet Campus, led by the Public Institution for Scientific Cooperation.
- •The Elisabeth de Portzamparc architectural firm has been appointed as lead contractor to carry out the surveys and monitoring of this work. The building, with an area of 23,020 m² of floor space, is on six levels plus a basement. The H-shaped building is built around an atrium.
- •The GED library, at the heart of the future university campus, will bring together collections currently distributed among forty-five separate libraries and will constitute a first-rate scientific centre for Île-de-France LSSH researchers (Letters, Social Sciences and Humanities), and beyond for all national research in the humanities and social sciences.

#### ▶ PROJECT LIFECYCLE

- •Work in progress since 25 May 2018
- •At this stage : soil reinforcement achieved.
- •Upcoming: delivery May 2020

#### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	245 FTEs	A-1
Social inclusion FTEs supported by the project	17 FTEs	В
Number of beneficiaries of the project	30,950	D-11
CO2 avoided by the project	285 CO2 teq/year	E-3



Environmental management and eco-design	<ul> <li>Assistance to the contracting authority for the development and monitoring of the environmental program since the scheduling until 1 year after the building's delivery.</li> <li>Extended environmental commitment: grey energy, indoor air quality, autonomy in natural lighting, bio-sourced materials.</li> <li>Green worksite charter limiting the nuisances.</li> </ul>	
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Optimisation of the bio-climatic design, such as: BBIO ≤ BBIOMAX.</li> <li>Non-polluting and low-emitting materials used in volatile organic compounds (VOCs).</li> <li>No air conditioning and natural night ventilation.</li> <li>Heavy vegetation with greening of the terraces and the presence of gardens north and south of the building, to effectively combat heat islands.</li> <li>Project located near the "Front Populaire" underground station.</li> </ul>	
Sustainable regional planning and improving quality of life	-Regional rebalancing in the field of higher education and research.	
Socially inclusive development, combating inequality, and promoting the safety of individuals	• Achievement of 44,200 hours of insertion (equivalent to 16.5 full-time jobs).	
Respect for fundamental rights	<ul> <li>Combating social, educational and regional inequalities.</li> <li>Improvement of the working conditions of PhD students and researchers by offering them dedicated documentation areas.</li> </ul>	
Responsible regional development	Implementation of integration jobs.	
Regional economic development	Creation of 245 FTEs for the construction phase.	
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Requirements on the choice of construction products (to save on natural resources, on CO2 emissions).</li> <li>Requirements concerning the origin of materials (limitation on grey energy)</li> </ul>	
Consultation with stakeholders	<ul> <li>Permanent consultation with future users (EPCS) and local authorities.</li> <li>Information for residents on the development of the Campus, via local authorities and the Campus Condorcet Public Institution.</li> </ul>	

# BIBLIOTHÈQUE DE DOCUMENTATION INTERNATIONALE CONTEMPORAINE - LA CONTEMPORAINE



# Projects: construction for higher education















Purpose	New construction
Locations	Nanterre
Key dates	Work in progress - Reception of works scheduled for end of August 2020
Total project cost	€ 29.5 million
Financing by the Region in the total amount of the project	34.0%
2018 financing by the green and sustainability bond	€ 1.5 million

#### **▶ QUALITATIVE PRESENTATION OF THE PROJECT**

- •The construction of the Bibliothèque de Documentation Internationale Contemporaine (library) (BDIC) is carried by the State (with the support of the Rectorate of Versailles), which ensures the project management. The estimated budget amounts to  $\in$  29.5m all expenses included. Funding under the State Region Plan Contract is borne by the State ( $\in$  15.8 million), the Region ( $\in$  10 million), the University ( $\in$  2.3 million) and the CDC ( $\in$  1.4 million). The BDIC is an interuniversity library administratively attached to the Paris Ouest Nanterre La Défense University.
- •The jury in charge of selecting the project manager, met in April 2016 and selected architect Bruno Gaudin as project manager for the completion of the studies and the follow-up of the operation. This new building, totalling 5,031 useful square meters, will be built next to the Nanterre Université RER station. It will bring together all the services of the BDIC, particularly those intended for the public, and will ensure preservation conditions adapted to heritage collections (museum works and archives).
- •La Contemporaine will host collections currently spread over the 2 existing sites located at the Paris Ouest Nanterre La Défense University and the Musée de l'Armée at Invalides. This will improve the readability and enhance the openness of the BDIC to the general public. A permanent exhibition area will also be created.

#### **▶ PROJECT LIFECYCLE**

- •Work in progress: start of construction site preparation since 26 October 2018.
- At this stage : foundations in progress.
- To come : delivery end of August 2020.

#### **► IMPACT INDICATORS**

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	87 FTEs	A-1
Number of beneficiaries of the project	11,450	D-11

w-up of the environmental program	
nagement specialising in sustainable from a regional guide to sustainable the project: design, completion and the ground lighting in corridors, approach in tion, waste management.	
, A+ category materials in contact with pare different construction variants. roject phase. and overall assessment at the end	
and research. baths.	
ulation with specific actions for such recycling depots such as the Réserve	
searchers by offering them dedicated	
).	
The operation represents 87 jobs for the construction phase.	
<ul> <li>Requirements governing the choice of construction materials (saving on natural resources, CO2 emissions, etc.).</li> <li>Requirements regarding the source of materials (limitation of grey energy).</li> </ul>	
st Nanterre La Défense Université.	

# CONSERVATOIRE NATIONAL DES ARTS ET MÉTIERS (CNAM) - LANDY 2

RS (CITAVI) - LATIDI Z REW PROJECT

Projects: construction for higher education















Purpose	New construction
Locations	Saint-Denis - Aubervilliers
Key dates	Studies in progress - Delivery planned in the 1st quarter of 2022
Total project cost	€ 33.3 million
Financing by the Region in the total amount of the project	85.0%
2018 financing by the green and sustainability bond	€ 0.5 million

#### **▶ QUALITATIVE PRESENTATION OF THE PROJECT**

- •The construction of the building is carried by Région Île-de-France, which is responsible for the project management and 85% of the financing.
- •The architectural firm TANK has been appointed as the prime contractor to conduct the studies and the follow-up of this operation. The building, with a mixed wood-concrete frame, has three levels. An interior garden is created, as well as two vegetated connections to the existing building.
- The project makes it possible to develop the existing CFA (apprentice training center) of which it will be an extension, to welcome more than 1,000 apprentices in the long term. In addition to the educational areas, there is a library-documentation centre, dining for 400 people, administrative premises, and waiter accommodation.

#### ► PROJECT LIFECYCLE

- Studies underway (tender documents "D.C.E.")
- •At this stage : building permit filed.
- ${}^{\bullet}\text{To come:}$  launch of the consultation for the completion of the works.

#### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	89 FTEs	A-1
Number of beneficiaries of the project	801	D-11
CO2 avoided by the project	10 teq CO <sub>2</sub> /year	E-2



Environmental management and eco-design	<ul> <li>Assistance to the project owner for the development and monitoring of the environmental program from planning until six months after the delivery of the building.</li> <li>Environmental program prioritizing energy efficiency, maintenance and sustainability of structures.</li> <li>Green worksite charter limiting the nuisances.</li> </ul>	
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Ambition in the energy field beyond regulatory obligations, i.e. a 30% reduction in consumption.</li> <li>No air conditioning and natural night ventilation.</li> <li>Heavy vegetation with the development of an indoor garden and a green roof to effectively fight against heat islands.</li> <li>Four parking spaces are reserved for electric vehicles, with charging stations.</li> <li>A covered and secure bicycle shelter is set up.</li> <li>Alternative management of rainwater, via pits and a retention pond. Collection for the watering of green areas.</li> </ul>	
Sustainable regional planning and improving quality of life	Regional rebalancing in the field of higher education.	
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>Achievement of social insclusion hours.</li> <li>Award of works contracts to facilitate access to public procurement by SMEs.</li> </ul>	
Respect for fundamental rights	Improvement of apprentices' working conditions by offering them dedicated areas.	
Responsible regional development	• Implementation of integration jobs.	
Regional economic development	The operation represents 89 jobs for the construction phase.	
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Requirements governing the choice of construction materials (saving on natural resources, CO2 emissions, etc.).</li> </ul>	
Consultation with stakeholders	Permanent consultation with future users (CNAM) and local authorities.	

# LEISURE AND SPORT CENTRE - VAIRES-TORCY

Project: construction of a sports complex of regional interest

		REFAND 8 BECENT WORK 100 REDUCED ERRORT BROWNE BROWNERS		
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Purpose			New cons	truction, renova	tion and develop	oment of the site
Locations			Vaires-To	rcy		
Key dates			Commend	ement of work:	2016; End of the	work planned in june 2019
Total project cost			€ 90.0 m	illion (current a	mount)	
Financing by the Region in the total amoun	t of the project		88.0%			
2018 financing by the green and sustainable	lity bond		€ 8.9 mill	ion		
History of project financing by previous gre	en and responsible	e regional borro	wing			
	2014	2015	2016	2017	2018	
	€1М	€ 9.5 M	€ 22.5 M	€ 32.6 M	€ 8.9 M	

#### **▶** QUALITATIVE PRESENTATION OF THE PROJECT

- Development of a set of facilities focused on high-level sports and leisure, as well as the corresponding infrastructure (white water stadium for canoeing, construction of a high level sports centre, improved amenities for the general public, upgrading of access approaches and public areas). 14 ha of outdoor facilities (creation of a new entry, creation of landscaped parks, creation of an ecological corridor and a meadow, creation of new landscaped areas and of a new pedestrian and cycling path along the lake shore.
- Construction of more than 19,000 m2 of usable surface area, of which 15,000 m2 are new and 4,000 m2 of an existing renovated building.
- •564,000 visitors affected each year by the project according to the attendance study and an evaluation of 54,000 beneficiaries for the whitewater portion.
- Participate in the rebalancing to the east by offering new quality infrastructure and by enhancing the quality of the public services provided by the Region to the east of its territory
- •Olympic installation for hosting kayak and rowing events in 2024.

- Organization in the future of national and international events on the site planned as of summer 2018, participating in the influence of the Seine-et-Marne and therefore of the Île-de-France.
- Co-financing with the State (Ministry of Sports, Youth, and Popular Education).

#### ▶ PROJECT LIFECYCLE

- September 2017: award of JOP 2024 and hosting of the Olympic rowing and kayak events confirmed.
- July 2018: receipt of the first instalment of works.
- July 2018: France/Great Britain rowing competition hosted.
- August 2018: triathlon, open water swimming and rowing events hosted at the Gay Games.
- June 2019: white water stadium hosted and site inaugurated.

#### ► IMPACT INDICATORS

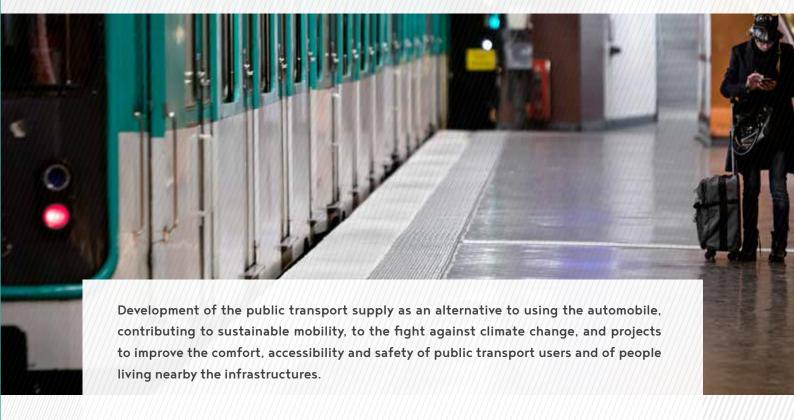
Indicator	Impact	Methodological note
Worksite FTEs supported by the project	104 FTEs	A-5
Social inclusion FTEs supported by the project	9 FTEs	В
Operation FTEs consecutive to the project	29 FTEs	C-2
Number of beneficiaries of the project	564,000	D-3



Environmental management and eco-design	<ul> <li>Signing of a "Worksite with Minimal Environmental Disturbances Charter" with the contractors service providers undertaking waste recovery commitment (excluding earthmoving waste) ≥ 50%, of which at least 20% in materials recovery, and seeking to limit the visual disturbance for the site users by ensuring the site's internal cleanliness.</li> <li>Worksite monitored by an HQE design firm that will ensure the commitments of the signatory contractors.</li> <li>Composting onsite and differentiated waste management during the operating phase.</li> <li>Use of wood for construction, which should have a PEFC or FSC label. (sustainable for est management).</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Renewable energy with ground water geothermal and solar thermal system for hot water in order to limit emissions of CO2.</li> <li>Optimization of the energy performance of the building shell and choice of materials promoting thermal inertia (maintaining of the temperature).</li> <li>Green roofs to absorb sunlight and to thus limit the temperature rise on the roof, and windows that can be opened to enhance natural ventilation (30% minimum of all the window bays for a location).</li> <li>Maintenance and restoration of the ecosystems with the creation of two ponds to recreate the habitats of amphibians and newts in compensatory measures, and preservation of the existing vegetation.</li> <li>Water management in connection with the watershed, to favour sloped pathways that allow water drainage.</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Project promoting access by alternative soft modes (pedestrians, bicycles, non-motorized boats), and providing a significant number of bicycle parking spaces.</li> <li>New landscaping over 15 ha: creation of a cone of vision towards the body of water and the Menier chocolate factory classified as historic building; creation of flower meadows and new plantings.</li> <li>Maintenance of green shorelines to the south and north of the site.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>Improved site accessibility for people with disabilities.</li> <li>The hosting centre includes a number of accessible rooms with higher specifications than the norm, and sufficient to allow the reception of groups, particularly athletes affiliated to disability or adapted sports federations.</li> <li>30,000 hours of worksite social inclusion are provided over the two years of work.</li> <li>Prevention of health risks for site personnel, who will be equipped with adequate protective clothing (auditory and visual protection, helmets, gloves, protective pants and shoes), listed in the Special Safety and Health Protection Plan.</li> <li>Pricing adjusted to promote access to the site for the greatest number of people.</li> </ul>
Respect for fundamental rights	<ul> <li>Promotes access to sports for everyone, recognized as a means to promote education, health, and social inclusion, which is a public interest objective (Art.100-1 of the Sports Code).</li> </ul>
Responsible regional development	<ul> <li>Strengthens the attractiveness and the development of tourism in the region.</li> <li>Hosts international events, thus contributing to the image of the region.</li> <li>Rebalancing of the geography of major infrastructures in the east of the Île-de-France.</li> </ul>
Regional economic development	<ul> <li>The work on site will require 104 FTEs.</li> <li>The permanent jobs are evaluated at 29 people and indirect jobs will also be created related to the equipment maintenance and cleaning.</li> <li>Projected doubling of the current business turnover of the Leisure Island.</li> </ul>
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Application of the Public Procurement Code</li> <li>Allocation of the work procurement contract to promote competition and the SMEs' access to the procurement contracts.</li> <li>Use of materials that are economic in natural resources.</li> <li>Subcontractors approved by the Contracting Authority subject to the same rules as the contract holder.</li> </ul>
Consultation with stakeholders	<ul> <li>Consultation of all the stakeholders of the project (sports movement, associations, communities, businesses) on the various phases of defining the development project.</li> <li>Implementation of a Project House on site to ensure the continuous proximity of information throughout the duration of the work.</li> <li>Creation of work groups to mobilize the territorial players around the definition of the future development project for the site.</li> </ul>



# PUBLIC TRANSPORT AND SUSTAINABLE TRANSPORTATION



- Leading transport policies in Île-de-France, Région Île-de-France participates in defining the transport organisation schemes with Île-de-France Mobilités, which is the authority that organises public transport in the Île-de-France. It co-finances large investment projects with its partners (such as State and General Councils).
- The extension of a line 14 to the north towards Saint-Ouen, financed by the green and sustainability bonds, is part of the network Greater Paris Express project.
- Another emblematic major project, the extension of the line EOLE to extend the RER E to the west of Île-de-France, allowing for a new east-west connection for the region, passing through Magenta station in Paris.
- The Region will also finance the electrification of the Paris-Troyes line, one of the last 2 major Paris-provinces radial lines not electrified to date.
- Region's jurisdiction: mandatory.
- Form of intervention: subsidies to the contracting authorities (Île-de-France Mobilités, RATP, SNCF, Departmental Council).
- Target: : all of the Île-de-France inhabitants.

# **SUBWAY LINE 4**

# Projects: subways

















Purpose		Exte	ension to Bagneu	ıx (phase 2)		
Locations		Mon	trouge and Bagr	neux		
Key dates		Com	mencement of c	ivil engineering	ı work: 8 July 201!	5; Projected commissioning: end 202
Total project cost		€ 30	07.1 million (pha	se 2)		
Financing by the Region in the total amount of	the project	60.0	0%			
2018 financing by the green and sustainability	bond	€ 3′	1.7 million			
History of project financing by previous green a	and responsible re	egional borrowin	g			
	2014	2015	2016	2017	2018	
	€ 27 M	€ 8.5 M	€ 42.6 M	€ 53 M	€ 31.7 M	

#### **▶** QUALITATIVE PRESENTATION OF THE PROJECT

- The extension of line 4 to Bagneux is a major issue for the mobility of Île-de-France inhabitants to the south of Paris: it involves the second busiest Paris metro line in terms of ridership, used daily by 674,000 passengers, with 27 stations and a length of 10.6 km. It connects with all the other metro and RER [suburban train] lines (except 3bis and 7bis).
- Project that is part of an overall vision for development of the territories served by allowing the modal shift, the opening up of the territories and better access to mobility.
- Eco-design of the project when choosing the construction materials and techniques, and construction of new metro stations with a particular emphasis on energy management and savings (low consumption, recovery, renewables), the management and consumption of drinking water and the recovery of seepage water.
- Project falls within the State-Region Plan Contract (CPER).

•Partners involved: the contracting authority (RATP) and the other financing partners, (State and the Department of Hauts-de-Seine).

#### **▶ PROJECT LIFECYCLE**

- Extension to the Town Hall of Montrouge completed in phase 1, commissioning on 23 March 2013.
- •Continuation of civil engineering works.
- Programme to raise awareness of safety in schools located near the works.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	2,180 FTEs	A-2
Number of beneficiaries of the project	755,800	D-4
CO2 avoided by the project	570 CO2 teq/year	E-3
Internal project profitability rate	10,8 %	F



Environmental management and eco-design	<ul> <li>Preference for sustainable equipment and materials and for low energy consumption systems or that optimizes them: low consumption technologies, rainwater recovery.</li> <li>Objective of using devices that can support subsequent adjustments.</li> <li>Provisions that limit waste production during the work phase and optimize their management for reuse and recycling: The contractors working on the site will follow the specifications establishing the rules for the collection, storage, recycling and disposal of construction waste. They will raise their staff's awareness concerning proper waste management and the cleanliness of the site and its surroundings.</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>An expected carryover from users of private cars to the subway, of about 4.5 million fewer vehicle-kilometres.</li> <li>Project that will reduce the costs related to the effects of pollution and the greenhouse gases of about 570 CO2teq/year (CO2 ton equivalents).</li> <li>Use of electrical energy for the project that will not contribute to air pollution and the greenhouse gases effect.</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>81,800 trips will be made on the extension of line 4 to the South of Paris (including 37,600 in phase 1), representing 22 million annual trips (10 million in phase 1).</li> <li>41,400 inhabitants and jobs less than 600 meters from the future extension, of which 85% weren't previously served by any heavy mode of transit.</li> <li>The current users of public transportation will gain 10 minutes on average, and the carry-over for cars will be 5 minutes.</li> <li>The ridership will be made up of: <ul> <li>89 % of riders who previously used public transit,</li> <li>6 % of riders who previously used private cars (modal carryover),</li> <li>5 % of new trips or riders previously making their trip on foot (induced ridership).</li> </ul> </li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>Accessibility of stations for persons with reduced mobility (PRM) from the roadways to the platforms by widened motorized passages or equivalent equipment as the future New Validation Passage (NPV) 90; elevators serving the roadway level, the platform level and, where appropriate, an intermediate level called "mezzanine".</li> <li>The project is in line with the fare structure in force for Île-de-France, which is fixed by Île-de-France Mobilités and which incorporates social fares financed by the Region to ensure access to mobility and public transport for the needlest.</li> </ul>
Respect for fundamental rights	<ul> <li>Respect for fundamental rights of workers who worked on the construction site by addressing their safety and complying with health protection laws and regulations.</li> </ul>
Responsible regional development	• The municipality of Bagneux wishes to implement a high-quality urban planning project throughout the site to rehabilitate the entrance to the city, reinvigorate the economic and commercial functions and meet the needs of the inhabitants for equipment, housing and improvements to the living environment. The extension of line 4 to Bagneux (at the location called "the Subway Island") will also strongly reinforce the site's attractiveness.
Regional economic development	• Based on current estimates, the project is expected to create 2,180.4 FTEs on the worksite for phase 2 of the extension of line 4.
Fair practices, responsible purchasing and responsible supplier relations	Subsidies from the Region granted to the contracting authorities that are themselves subject to the Public Procurement Code (Approval in financing agreement - Law No. 85-704 of 12 July 1985 as amended on the public contracting authority and its relationship with the private prime contractor).
Consultation with stakeholders	<ul> <li>Prior consultation held in June/July 2001; public survey from 9 January to 10 February 2012.</li> <li>Establishment of information tools for neighbouring residents, shopkeepers and to monitor the work: brochures and information flyers, dedicated website.</li> <li>A community representative dedicated to dialogue with shopkeepers and residents during the construction phase.</li> </ul>

Dedicated website: http://www.prolongement-m4.fr/



# **SUBWAY LINE 11**

# Projects: subways



Purpose			Extensio	Extension to Rosny-Bois-Perrier			
Locations			Paris, Le	Paris, Les Lilas, Romainville, Noisy-le-Sec, Rosny-sous-Bois			
Key dates			Commen	Commencement of preliminary work: 2016; Projected commissioning: 2022			
Total project cost			€ 1,298	€ 1,298.0 million			
Financing by the Region in the total amount of the project			42.9%	42.9%			
2018 financing by the green and susta	inability bond		€ 73.6 n	€ 73.6 million			
History of project financing by previous	s green and resp	onsible regional	borrowing				
	2014	2015	2016	2017	2018		
		<b>—</b>	<del></del>	$\overline{}$	<del></del>		
	-	-	€ 2.8 M	€ 77.7 M	€ 73.6 M		

#### **▶ QUALITATIVE PRESENTATION OF THE PROJECT**

- •The eastern extension of the metro line 11 includes the completion of 6 km of railways and the creation of 6 stations through to the station of Rosny-Bois-Perrier.
- •The number of users switching from private cars to the line 11 is estimated at around 7%, or 1.33 million fewer private car journeys per year. The project will thus help to relieve road congestion and reduce pollution caused by private car transport.
- •The project is part of a global vision of the development of the territories served and allows users to choose a more environmentally friendly mode of public transport.
- Partners involved: joint owners (RATP and Île-de-France Mobilités) and other funders (State, Société du Grand Paris, City of Paris and Department of Seine-Saint-Denis).

#### ▶ PROJECT LIFECYCLE

 26 construction sites are currently open between Châtelet and Rosny-Bois-Perrier, both for the adaptation of existing stations, and for extension work.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	9,216 FTEs	A-2
Number of beneficiaries of the project	331,000	D-4
CO2 avoided by the project	3,255 CO2 teq/year	E-3
Internal project profitability rate	7,9 %	F



Environmental management and eco-design	• RATP, the project owner, is involved in its sustainable development policy by managing the environmental risks of its industrial sites (e.g. on the future site of maintenance and storage: treatment of polluted land) and the infrastructure It operates, through the eco-design of the infrastructure, systems, and equipment, which it specifies or designs, and through the purchases it makes.
Combating climate change, and promoting the Region's environmental transition	<ul> <li>The number of users switching transport modes from private cars to the line 11 is estimated at around 7%, or 1.33 million fewer private car journeys per year. The project will thus help to relieve road congestion.</li> <li>Expected reduction of greenhouse gases of 3,255 CO2 teq/year.</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>General average time saved for current transit users estimated at 10 minutes per trip, representing a total time savings of 3.6 million hours per year.</li> <li>In total, taking into account the time saved by other users and that due to the better station accessibility, the annual time savings amount to 4 million hours per year.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>New stations accessible to people with disabilities: the paths in the station between the roads and the platforms will be accessible by elevators for the main access route. The platforms will always be in aligned for easy access to the trains.</li> <li>Integration of the project with the pricing in force in Région Île-de-France, set by Île-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.</li> </ul>
Respect for fundamental rights	<ul> <li>Respect for the fundamental rights of workers who work on the site, in particular by ensuring their safety and by respecting the legislation for the health protection.</li> </ul>
Responsible regional development	<ul> <li>The project will serve 68,000 inhabitants and 14,500 jobs.</li> <li>The project supports several development sectors (ZAC Boissière-Acacia in Montreuil, ZAC Centre-Ville in Lilas, ANRU sectors).</li> <li>Communities and developers are involved throughout the project's development and implementation in order to ensure its consistency and relevance in terms of economic development and the areas to be served in priority.</li> </ul>
Regional economic development	<ul> <li>Estimated creation of 9,216 FTEs on-site.</li> <li>Around the metro stations, the new services represent an opportunity for businesses and economic activities.</li> <li>The project will make it easier to access jobs in the sector and, for the residents near the stations, access to jobs and places of study in Île-de-France.</li> </ul>
Fair practices, responsible purchasing and responsible supplier relations	Within the framework of the projects supported by the Region, the grants awarded to the contracting authorities (the RATP for this project) are subject to the Public Procurement Code.
Consultation with stakeholderss	<ul> <li>Regular information given to residents on the evolution of the stages of the site.</li> <li>Specific information campaigns will also be put in place among elected representatives, associations, residents near the building site and passengers of the metro and bus networks.</li> <li>Local agents accompany the construction site on the field, liaising between residents, elected representatives and construction companies (office hours in a dedicated space, "site info" phone number).</li> <li>A dedicated online portal will be put in place.</li> </ul>
	7



# **SUBWAY LINE 14**

Projects: subways













Purpose			Extension	Extension to mairie de Saint-Ouen			
Locations			Paris, Cli	Paris, Clichy and Saint-Ouen			
Key dates			Commend	Commencement of work: July 2013; Projected commissioning: summer 2020			
Total project cost			€ 1,380.0	€ 1,380.0 million			
Financing by the Region in the total amo	Financing by the Region in the total amount of the project			13.62%			
2018 financing by the green and sustain	nability bond		€ 19.5 mi	€ 19.5 million			
History of project financing by previous	green and respon	nsible regional b	orrowing				
	2014	2015	2016	2017	2018		
	€ 39 M	€ 23.1 M	€ 73.1 M	€ 30.1 M	€ 19.5 M		

#### ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- First link in the Grand Paris Express network.
- Project integrated into a comprehensive vision of the development of the territories served.
- •Goal of desaturating line 13: the ridership studies have shown that the rate of discharge from line 13 thanks to the extension of Line 14 is greater than 23% on the common core and more than 19% on the branches, which will improve the riding conditions for users of public transportation.
- •The completion of project for the extension of Line 14 will induce a carryover of users of cars or motorcycles to public transportation of 33,686,400 veh.km/year. This carryover will reduce the production of GHG induced by transportation by individual cars.
- Project falls under the State-Region Plan Contract (CPER), contractual document.

• Partners involved: joint contracting authorities (RATP and Île-de-France Mobilités) and the other financers (State, Greater Paris Company, City of Paris and Departments of Hauts-de-Seine and Seine-Saint-Denis).

#### **▶ PROJECT LIFECYCLE**

- •Continuation of the extension works (construction of the stations, maintenance and storage site, laying of tracks). Tunnelling excavations are complete.
- •Continuation of works related to the transport system (audio-visual means, SAET, track, platform screen doors, etc.).

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	9,798 FTEs	A-2
Number of beneficiaries of the project	176,000	D-4
CO2 avoided by the project	7,310 CO2 teq/year	E-3
Internal project profitability rate	10,0%	F//////F////F/////F///////////////////



Environmental management and eco-design	<ul> <li>The RATP is mobilizing its sustainable development policy around commitment No.4 "exemplary professional practices" by the management of the environmental risks from its industrial sites (e.g. on the future maintenance and storage site: treatment of polluted soil (asbestos, hydrocarbons, etc.) And of the infrastructure that it operates, through the eco-design of the infrastructure, systems, equipment, which it specifies or designs, by the purchases that it makes.</li> <li>Since 2001, the RATP has been using a continuous improvement approach by controlling and anticipating all the aspects that are within its responsibilities in terms of resource use or impact on the natural environment and on the local residents. This initiative has resulted in the ISO 14001 certification of several metro lines (ex. 1, 8, 14) and various maintenance workshops.</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Expected modal shift by the users of cars or motorcycles towards public transit of 33,686,400 veh.km/year.</li> <li>Expected reduction in greenhouse gas emissions of 7,310 t eq.CO 2/year.</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Average general time saving for current users of public transportation is estimated at 6 minutes per trip due to the extension of Line 14, which for a total of 162,000 trips per day, corresponds to a total time savings of 4.7 million hours per year.</li> <li>The time savings for current car users who will now use line 14 is considered equal to half of the gain for the former users of public transportation, i.e. 3 minutes per trip.</li> <li>Improved comfort for the users of line 13, the project provides an estimated discharge rate from line 13 greater than 23% on the core and over 19% on the branches (according to the ridership studies).</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>New stations accessible to People with Reduced Mobility (PRM) the pathways in the station between the roadway and platforms accessible by elevators to the main access route; the platforms will always be in a straight line to allow easy access to the trains.</li> <li>The project is in line with the fare structure in force for Île-de-France, which is fixed by the Île-de-France Mobilités (Île-de-France Transport Association) and which incorporates social fares financed by the Region to ensure access to mobility and public transport for the needlest.</li> </ul>
Respect for fundamental rights	<ul> <li>Respect for fundamental rights of workers who worked on the construction site by addressing their safety and complying with health protection laws and regulations.</li> </ul>
Responsible regional development	<ul> <li>Positive economic impact by facilitating access to industry and jobs for residents from the stations to facilitate access to jobs and study locations in the Île-de-France: the project will ultimately serve 96,100 residents and 72,000 jobs.</li> <li>Project accompanying the development of the sector under development (ZAC des Docks, ZAC Victor Hugo, etc. in Saint-Ouen; ZAC Morel-Sanzillon, etc. in Clichy; Batignolles sector, ZAC Clichy-Batignolles, etc. in Paris).</li> </ul>
Regional economic development	• Estimated creation of 9,798 FTEs on the construction site.
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Subsidies from the Region granted to the contracting authorities that are themselves subject to the Public Procurement Code (Approval in financing agreement - Law No. 85-704 of 12 July 1985 as amended on the public contracting authority and its relationship with the private prime contractor).</li> </ul>
Consultation with stakeholders	<ul> <li>Public survey from January to February 2012 and DUP in October 2012.</li> <li>Information provided regularly to nearby residents on the progress of the stages of the project, holding of public information meetings, signage and targeted information letters.</li> <li>Community representatives to liaise between the residents, elected officials and contractors, with hotlines in a dedicated location near the worksite are provided by the community representative. It can also be reached on a "site info" phone number.</li> <li>A special internet portal will be set up.</li> <li>Municipalities and related developers throughout the development and implementation of the metro project in the context of specific meetings (technical committee, monitoring commissions).</li> </ul>
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Dedicated website: http://www.prolongerligne14-mairie-saint-ouen.fr/



# TRAMWAY LINE T4

# Projets tramways



Purpose		New bran	New branch between Bondy and Montfermeil			
Locations			Pavillons-sous-Bois, Livry-Gargan, Clichy-sous-Bois and Montfermeil			
Key dates		Commen	cement of work:	2015; Projected c	ommissioning: end-2019	
Total project cost		€ 255.8	€ 255.8 million			
Financing by the Region in the total amount of	of the project	49.0%	49.0%			
2018 financing by the green and sustainabili	ity bond	€ 13.1 mi	€ 13.1 million			
History of project financing by previous gree	n and responsible regional b	oorrowing				
	2014 2015	2016	2017	2018		
		€ 6.2 M	€ 9.3 M	€ 13.1 M		

#### **▶ QUALITATIVE PRESENTATION OF THE PROJECT**

- The project seeks to create a new tramway link between Bondy and Montfermeil. The new branch created off Gargan station will include 11 new stations.
- •The project will make journeys easier for the 45,000 residents and workers located in a strip of 400 metres on either side of the T4 tramway branch project.
- The project is part of a global vision of the development of the territories served and allows users to choose a more environmentally friendly mode of public transport in total confidence. It gives more public space to non-motorised transport methods (pedestrians, bicycles).
- •Partners involved: The project owners (Île-de-France Mobilités and SNCF) and the other co-financiers (State).

#### ▶ PROJECT LIFECYCLE

- •Works amplified in 2018: the infrastructure works started for all the sections and the laying of the tracks was completed overall, making it possible to start the installation of the equipment in the 1st half of 2019.
- The new branch of the T4 should be commissioned by the end of 2019.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	1,816 FTEs	A-2
Number of beneficiaries of the project	62,000	D-5
Internal project profitability rate	8,7%	F



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	<ul> <li>The work of the project is organised in such a way as to optimise their duration and reduce the nuisance to residents.</li> </ul>					
Environmental management	On most sections of the new branch, the project plans to plant as many new trees as possible.					
and eco-design	• The clearing of the Bosquet du Chêne Pointu will be compensated for at least 200% on a 6,000 m² plot.					
	· The project is an occasion to create a "green ribbon" to dress up the tramway platform.					
Combating climate change, and promoting the Region's environmental transition	The project will create favourable conditions for a modal shift from the passenger car to the new tramline.					
Sustainable regional planning	<ul> <li>Average journey time reduction at the morning rush hour: 10 minutes for those already traveling by public transport, 5 min. for new users.</li> </ul>					
and improving quality of life	<ul> <li>The project, included in the "Espoir Banlieues" Plan, will support the urban redevelopment of a land- locked territory in great social difficulty by financing and undertaking the complete redevelopment of the public spaces served by the tramway.</li> </ul>					
	The project will restructure and beautify the living environment of local residents.					
	<ul> <li>The tram stations meet the safety and accessibility criteria for all categories of users (emergency call terminals, CCTV cameras and remote signalling equipment).</li> </ul>					
Socially inclusive development, combating the safety of individuals	<ul> <li>In terms of solidarity, the project will open up cities on a plateau that is currently separated from the structuring public transport lines in Région Île-de-France.</li> </ul>					
	<ul> <li>The project is integrated with the pricing in force in Région Île-de-France, set by Île-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.</li> </ul>					
	The project will meet users' mobility needs.					
Respect for fundamental rights	<ul> <li>The project will respect the fundamental rights of workers who will be working on the site, in particular by ensuring their safety and by respecting the legislation for the health protection.</li> </ul>					
	<ul> <li>The project will enhance the attractiveness of the territory in an area marked by a high density of landlocked population.</li> </ul>					
Responsible regional development	<ul> <li>It will meet the new travel needs generated by urban and transport projects in the sector: Urban Renewal project, Bas Clichy project, ZAC Cœur de Ville in Montfermeil, Clichy-Montfermeil train station on line 16 of the Grand Paris Express, and the Tour Médicis project in Clichy.</li> </ul>					
Desired according development	• Estimated creation of 1,816 FTEs on-site.					
Regional economic development	Social clauses are inserted in works contracts to promote the local employment of people in difficulty.					
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>In the framework of this project, the Region allocated subsidies to project owners Île-de-France Mobilités and SNCF, who are subject to the Public Procurement Code.</li> </ul>					
	<ul> <li>The preliminary consultation was organised from 1st September to 31 October 2009.</li> </ul>					
	<ul> <li>The public inquiry was held from 10 December to 24 January 2013 and the Public Interest Order was issued on 12 September 2013.</li> </ul>					
Consultation with stakeholders	<ul> <li>Information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures, a dedicated website, T4 Infos team with facilities to receive the public.</li> </ul>					
	<ul> <li>For shopkeepers, a commercial mediator informs them, advises them and accompanies them throughout the period of the works.</li> </ul>					
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# TRAMWAY LINE T9

# Projets tramways



Purpose			New line	New line between Paris and Orly ville			
Locations			Paris, Ivr	Paris, Ivry-sur-Seine, Vitry-sur-Seine, Choisy-le-Roi, Thiais, Orly			
Key dates			Commen	Commencement of work: 2015; Projected commissioning: 2020			
Total project cost			€ 403.3	million			
Financing by the Region in the total amount of the project			53.3%	53.3%			
2018 financing by the green and susta	inability bond		€ 10.0 m	€ 10.0 million			
History of project financing by previou	s green and respo	nsible regional	borrowing				
	2014	2015	2016	2017	2018		
		-	€ 3.4 M	€ 1.9 M	€ 10.0 M		

#### **▶** QUALITATIVE PRESENTATION OF THE PROJECT

- •The Tram 9 will connect Porte de Choisy in Paris to the city centre of Orly in 30 minutes. Its 19 stations will serve 6 cities: Paris 13th, lvry-sur-Seine, Vitry-sur-Seine, Choisy-le-Roi, Thiais and Orly city.
- •The project will make journeys easier for the 140,000 residents and 65,000 workers located on either side of the tramway line.
- •The project is integrated into a global planning vision for the communities concerned: The Department of Val-de-Marne, the Association Seine Amont Développement (ASAD), the cities of lvrysur-Seine, Vitry-sur-Seine, Thiais, Choisy-le-Roi, Orly, the EPA ORSA, Île-de-France Mobilités, and the Region are committed to carrying out the urban planning-transport charter. It must allow a good match between the tramway project and the various urban projects under way and to come. The themes studied were defined in consultation with all the local actors.
- Partners involved: the project owner (Île-de-France Mobilités) and the other co-financiers (the State, Val-de-Marne Departmental Council, City of Paris and Grand-Orly Seine Bièvre Territorial Public Authority).

#### ► PROJECT LIFECYCLE

- •Following the preparatory work, the infrastructure works started in mid-2018 to build the platform and the urban structures.
- The new Tram T9 line is expected to be commissioned in 2020.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	2,863 FTEs	A-2
Number of beneficiaries of the project	70,000	D-5
CO2 avoided by the project	1,338 CO2 teq/year	E-3
Internal project profitability rate	9.5%	F

Environmental management and eco-design	<ul><li>The work is organised in such a way as to optimise its duration and reduce the nuisance to residents.</li><li>Creation of a "green ribbon" to dress up the tramway platform.</li></ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Shift from passenger cars to the new tram line: an estimated 3% of tramway traffic, i.e. 6.1 million veh.km per year saved thanks to the project.</li> </ul>
environmental transition	1,338 teqCO2 will be saved per year thanks to the project.
Sustainable regional planning and improving quality of life	<ul> <li>Reduction of journey times of 4 minutes and 45 seconds per passenger for former users of the bus line, 2 min 40 sec for former transit users, 1 min 20 sec for new users of public transport (shifted from private cars and walking).</li> </ul>
	<ul> <li>The project will restructure and beautify the living environment of local residents, while respecting and highlighting the heritage and green characteristics of areas crossed.</li> </ul>
Socially inclusive development, combating inequality, and promoting	<ul> <li>The tram stations meet the safety and accessibility criteria for all categories of users (emergency call terminals, CCTV cameras and remote signalling equipment).</li> </ul>
the safety of individuals	<ul> <li>The project is integrated with the pricing in force in Région Île-de-France, set by Île-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.</li> </ul>
Respect for fundamental rights	The implementation of the project respects the fundamental rights of workers who work on the site, in particular by ensuring their safety and by respecting the legislation for the health protection.
	<ul> <li>The project will increase the attractiveness of the territory in a densely populated area but not adequately served by public transport until now.</li> </ul>
Responsible regional development	<ul> <li>The project will support the urban redevelopment of the territory by financing and undertaking the complete redevelopment of the public spaces served by the tramway.</li> </ul>
	<ul> <li>It will meet the new travel needs generated by urban and transport projects in the sector: ZAC du Plateau in Ivry-sur-Seine, ZAC Rouget-de-Lisle and ANRU Balzac in Vitry-sur-Seine, ZAC du Port in Choisy-le-Roi, and Grands Vœux sector in Orly.</li> </ul>
	<ul> <li>Based on current estimates, the project will create 2,863 FTEs on site.</li> </ul>
Regional economic development	<ul> <li>Social clauses are and will be inserted in works contracts to promote the local employment of people in difficulty.</li> </ul>
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>In the framework of this project, the Region is allocating subsidies to project owner Île-de-France Mobilités, who is subject to the Public Procurement Code.</li> </ul>
	Prior consultation was organised in October / November 2012.
Consultation with stakeholders	<ul> <li>The public inquiry was held in June / July 2014 and the Public Interest Order was issued on 2 February 2015.</li> </ul>
	Information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures and a dedicated website.

Dedicated website: http://www.tram9.fr



# TRAMWAY LINE T11 (NORTH TANGENTIAL)

#### Projects: tramways

















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Purpose			New tram	way-train line b	etween Epinay ar	nd Le Bourg	et (Phase 1)	
Locations			Epinay-s	ur-Seine, Deuil-	la-Barre, Montma	gny, Villet	aneuse, Pierref	itte, Stains, La
			Courneuv	ve, Le Bourget				
Key dates			Commend	cement of work:	2009; Commissio	ning: July	2017	
Total project cost			€ 610.9 ı	million				
Financing by the Region in the total an	nount of the projec	et	49.6%					
2018 financing by the green and susta	inability bond		€ 15.5 mi	illion				
History of project financing by previou	s green and respo	nsible regional k	porrowing					
	2014	2015	2016	2017	2018			
		9	9	9				
	€ 41 M	€ 120.7	€ 49.1 M	€ 15.3 M	€ 15.5 M			

#### **▶** QUALITATIVE PRESENTATION OF THE PROJECT

- Project that serve the Northwest of the Seine-Saint-Denis, sector particularly affected by issues of economic redeployment, transfer or requalification (Epinay-sur-Seine, Villetaneuse, Pierrefitte and Stains) to accompany more closely the already initiated economic development  $\,$ and actively revitalize these territories of Île-de-France.
- Will enable the strengthening of the supply of transport on ring roads on Northern Territory Île-de-France, in connection with the existing network (RER B, C and D, the Transilien H tram line) and future network (Greater Paris) without transiting Paris.
- •A very attractive alternative to the private car with eventually 18.42 million users expected annually, of which 3.5 million users deferred from the road.

- •11 km track on phase 1 Epinay-le Bourget, with a later extension in phase 2 for 12 km to the West (up to Sartrouville) and 5 km to the East (up to Noisy-le-Sec)
- Partners involved: the project owners (SNCF Réseau, SNCF Mobilité),Île-de-France Mobilités, organising transport authority, and other financers (The State, Department of the Seine-Saint-Denis and Department of Val-d'Oise).

#### ► PROJECT LIFECYCLE

•The project was implemented on 1 July 2017.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	4,337 FTEs	A-2
Number of beneficiaries of the project	65,800	D-5
CO2 avoided by the project	20,700 CO2 teq/year	E-3
Internal project profitability rate	11,0%	F

Environmental management and eco-design	<ul> <li>Maintenance site of trains under construction at Noisy-le-Sec, which will include a green roof, photo voltaic panels and a rainwater recovery system.</li> <li>HQE approach to railway station construction (notably eco-responsible materials).</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Modal shift ratio from the private car to the new tram-train line estimated at 19%.</li> <li>Reduction of pollution with savings estimated at 20,700 tegCO2 per year (phase 1 only).</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>The average time saving for a public transport user is estimated at 8.7 minutes per journey.</li> <li>Implementation of acoustic screens on 13 km of the route, to reduce the noise associated with the project, as well as noise of freight trains which are already circulating on the great railway belt.</li> <li>Goal of optimal integration of railway stations in sites: buildings designed to blend into the landscap without creating a visual rupture (industrial metal frame of the kind used in horticultural greenhouses and in a framework of strong integration to the city or to the existing street network.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>The project will participate in the fight against territorial inequalities. It is indeed listed in the Plai Espoir Banlieues, initiative aimed specifically at opening up problem neighbourhoods by improving their access to public transport.</li> <li>The project is in line with the fare structure in force for Île-de-France, which is fixed by the Île-de France Mobilités (Île-de-France Transport Association) and which incorporates social fares financed be the Region to ensure access to mobility and public transport for the needlest.</li> </ul>
Respect for fundamental rights	<ul> <li>Respect for fundamental rights of workers who worked on the construction site by addressing their safety and complying with health protection laws and regulations.</li> </ul>
Responsible regional development	<ul> <li>The project reinforces the attractiveness of an area where transport infrastructure needs are significant: serving 2.2 million inhabitants and 0.8 million jobs located on the project study area.</li> <li>Will enable to connect Île-de-France activity hubs and universities to each other, without crossing Pari (Université Paris-Villetaneuse, La Plaine Saint-Denis et Le Bourget).</li> </ul>
Regional economic development	• Estimated creation of 4,337 FTEs on the construction site.
Fair practices, responsible purchasing and responsible supplier relations	Subsidies from the Region to the contracting authorities that are subject to the Public Contracts Code
Consultation with stakeholders	<ul> <li>Pre-consultation in 1999, then in 2003 on a new variant corresponding to the current project.</li> <li>Public survey from 6 November to 16 December, 2006 and the Decision of Public Service, on the entire project, was made by Decree of the Prime Minister and published in the Official Journal on 29 Ma 2008.</li> <li>Information packs for residents, inhabitants and traders were made available for monitoring the work brochures and information flyers, dedicated website.</li> </ul>

Dedicated website: http://www.tram11express.fr/



# TRAMWAY LINE T12

# Projects: tramways















Purpose		New lii	ne between Mass	sy-Palaiseau an	d Evry Courcouror	nnes	
Locations			Massy, Palaiseau, Champlan, Longjumeau, Chilly-Mazarin, Epinay-sur-Orge, Savigny-sur-Orge, Morsang-sur-Orge, Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Evry				
Key dates		Comme	encement of wor	k: 2017			
Total project cost		€ 576.	7 million				
Financing by the Region in the total am	ount of the project	55.8%					
2018 financing by the green and sustai	nability bond	€ 14.8	million				
History of project financing by previous	green and responsib	ble regional b	orrowing				
	2014	2015	2016	2017	2018		
		-	€ 7,4 M	€ 11.3 M	€ 14.8 M		

#### **▶ QUALITATIVE PRESENTATION OF THE PROJECT**

- The project consists of creating a new link between the cities of Massy and Evry in the form of a tram-train. It is structured in two sections: a railway section between Massy-Palaiseau and Epinay-sur-Orge where it will replace the existing branch of the RER C over 10.1 km and an urban section passing through the creation of a new tramway over 10.6 km between Epinay-sur-Orge and Evry-Courcouronnes.
- •The T12 Express project covers the north of the department of Essonne, which is affected by economic development issues and offers transfers to RER lines B, C and D.
- •The project reinforces the offer of transport in a ring crossing through the south of Île-de-France, connecting to the existing (RER, Transilien) and coming (Greater Paris) transport networks. It is integrated into a global vision of the development of the territories concerned and offers an attractive alternative to the private car.
- •The partners involved: the project owners (SNCF Réseau, SNCF Mobilité), Île-de-France Mobilités and other funders (the State, Department of Essonne).

#### ▶ PROJECT LIFECYCLE

- A Memorandum of Understanding to fund the works was approved in 2017 by all partners involved in this operation.
- In 2018, works were initiated on the three areas of project management: maintenance and storage site, railway section (in particular the resumption of the Massy track plan) and urban section (launch of the works on the entire linear structure).

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	4,095 FTEs	A-2
Number of beneficiaries of the project	40,000	D-5
CO2 avoided by the project	2,534 CO2 teq/year	E-3
Internal project profitability rate	5,8%	F////////F/////F//////////////////////

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	<ul> <li>The SNCF, the project owner, is committed to social responsibility and aims in particular to reduce the environmental impacts of its projects.</li> </ul>
Environmental management and eco-design	<ul> <li>Particular attention was paid to the insertion of the T12 Express garage workshop (greenery to improve the landscape quality of the site for the residents, the HQE building in a wooden structure, the green roof of the workshop and custodian facilities to improve the insulation of buildings, rainwater harvesting).</li> </ul>
	<ul> <li>The facilities along the route incorporate cycling facilities ensuring the best possible continuity with existing bike routes.</li> </ul>
Combating climate change, and promoting the Region's environmental transition	The project will help reduce pollution with savings estimated of around 2,534 teqCO2 per year.
Sustainable regional planning and improving quality of life	<ul> <li>The new line will improve the quality of life of users in Région Île-de-France: the average time saved for a public transport user is estimated at 6 minutes per trip.</li> </ul>
	The project helps open up districts that are located near the T12 express.
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>In terms of solidarity, the new T12 Express line will be integrated with the pricing in force in Région Île-de-France, set by Île-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.</li> </ul>
Respect for fundamental rights	<ul> <li>As part of its implementation, the project respects the fundamental rights of workers who work on the site, in particular by ensuring their safety and by respecting the legislation for the health protection.</li> </ul>
	<ul> <li>The project will enhance the attractiveness of the territory in an area with great needs in terms of transport infrastructure. The project will notably link up clusters of activities, without going through Paris (Massy and Evry).</li> </ul>
Responsible regional development	<ul> <li>The T12 will encourage public transport for workers from the municipalities served (51,000 workers), of whom only 19% of those who work in this territory use this mode of transport. It will also make it possible for residents outside of this area to use public transport via a mesh network to other lines (RER B, C and D).</li> </ul>
Regional economic development	Based on current estimates, the project will create 4,095 FTEs on site.
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>In the framework of this project, the Region allocated subsidies to project owners Île-de-France Mobilités, SNCF Mobilités and SNCF Réseaux, who are subject to the Public Procurement Code.</li> </ul>
	Prior consultation was organised between May and July 2008.
Consultation with stakeholders	• The public inquiry took place between 7 January and 11 February 2013 and the Decision on Public Utility, covering the entire project, was published on 22 August 2013.
	<ul> <li>Information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures and a dedicated website.</li> </ul>
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Dedicated website: http://www.tramtrain-massyevry.fr/



# ÉOLE

#### Projects: railway links















Purpose			West extension	of the RER E					
Locations					ouilles, Carrières- pône, Mézières, Ma		•	'illennes-sur-	Seine,
Key dates					Project commission	_	Nanterre-L	.a-Folie: 2022	; Full
Total project cost			€ 3,740.9 milli	on					
Financing by the Region in the total amount of the project		28.3%							
2018 financing by the green and sustainabil	ity bond		€ 34.3 million						
History of project financing by previous gree	n and responsible	regional borro	wing						
	2014	2015	2016	2017	2018				
			€ 32.0 M	€ 12.8 M	€ 34.3 M				

#### **▶** QUALITATIVE PRESENTATION OF THE PROJECT

- RER line E west extension, from Haussmann Saint-Lazare station to Mantes-la-Jolie station.
- •The project is 55 km long, with the construction of a new underground infrastructure of about 8 km, the redevelopment of the existing line over 47 km and the creation of three new stations: Porte Maillot, La Défense and Nanterre La Folie. It also provides for new trains.
- An innovative project with a new Nexteo operating system (it will make it possible to run more trains on a single line faster) and operating in redundancy (two self-sufficient branches will operate in parallel on the central section from Nanterre-la-Folie to Rosa Parks; this will make it so that one branch is not impacted should the other branch encounter delays).
- •The Eole project is committed to introducing employment clauses in its contracts that reserve 7% of the hours worked for professional integration. After one year of construction, 124,127 hours of professional work was completed in January 2018, out of the 345,898 hours corresponding to the contracts that have started.

•Involved partners and public co-financiers: the project owners (SNCF Réseau, SNCF Mobilité, Île-de-France Mobilités) other funders (The State, Greater Paris, City of Paris, Departmental Council of Hauts-de-Seine, Departmental Council of Yvelines).

#### ► PROJECT LIFECYCLE

- December 2017: signature by all the financial partners of the framework protocol concerning the financial commitments and the conventions necessary to implement the project.
- •In 2018, work intensified throughout the linear structure. The works under the CNIT at La Défense, the construction of the tunnelling tunnel (whose digging will start in 2019), and the laying of the decks of the Seine railway crossing bridge.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	26,554 FTEs	A-2
Number of beneficiaries of the project	1,400,000	D-4
CO2 avoided by the project	8,040 CO2 teq/year	E-3
Internal project profitability rate	9,6%	F



Environmental management	Site eco-design logic: management of construction waste, discharge of pollutants, limitation of
and eco-design	nuisances caused by the site (noise, pollution, vibration, lighting, transport of dangerous materials)
Combating climate change,	Shift in transport modes estimated at 67 million veh.km in 2020, with annual growth of 1%.
and promoting the Region's environmental transition	<ul> <li>The net modal transfer rate is around 3% of RER E users, the share of induced traffic is 2 to 4% depending on the model.</li> </ul>
	Estimated savings, due to the modal shift from road to rail, of 8,040 teqCO2 per year.
Sustainable regional planning and improving quality of life	<ul> <li>Decrease in the number of trains on the busiest section of the RER A between Châtelet-les-Halles and Auber of 12% during rush hour compared to a 2020 situation without extensions to the RER E.</li> </ul>
	Yearly time saved: on average 6 minutes, equal to 18 million hours per year.
	<ul> <li>Promotes opening up the territory and is fully part of a will to fight against inequalities between territories.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>The contracting authority requires companies to entrust a minimum number of working hours to persons with difficulty in employment, to train them and to support them so as to encourage their access to sustainable employment and to reintegrate them on a permanent basis into the job market.</li> </ul>
	<ul> <li>The number of hours of social inclusion for civil works completed in January 2018 is estimated at 70,000 for the Yvelines department, 720,000 for Paris and 124,127 hours for the Hauts-de-Seine department.</li> </ul>
Respect for fundamental rights	<ul> <li>By promoting intermodality and better service in the region, this project promotes the right to come and go.</li> </ul>
	The project participates in the development and dynamization of the region, and promotes the urbar rehabilitation and urban development of Seine Aval.
Responsible regional development	<ul> <li>Access to jobs will be significantly improved. It may result in more than 250,000 additional jobs in less than an hour for those who reside in the east and north of Paris, in the central part of Hauts-de-Seine and in Seine Aval.</li> </ul>
	• Estimated job creation at 26,554 FTEs.
Regional economic development	<ul> <li>The project should encourage the implementation of businesses or strengthen the existing activity in the Seine valley and in Paris, in La Défense, by improving access.</li> </ul>
	• In addition, the extension will result in the creation of jobs for transport agents.
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Subsidies from the Region granted to the Contracting Authorities, themselves subject to the Public Procurement Code.</li> </ul>
	Public debate: autumn 2010.
Consultation with stakeholders	<ul> <li>Public inquiry: from 16 January to 18 February 2012 and the Decision on Public Utility published or 31 January 2013.</li> </ul>
	<ul> <li>Implementation of information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures and a dedicated website.</li> </ul>
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Dedicated website: http://www.rer-eole.fr/



# LIGHE P (PARIS-TROYES)

Projects: railway links















Purpose			Electrifica	Electrification of the railway line P between Paris and Troyes			
Locations				Two Departements: Aube et Seine-et-Marne (cities of Verneuil L'Etang, Mormant, Nangis, Longueville, Sainte-Colombes, Poigny, Provins)			
Key dates			Commenc	Commencement of work: 2017			
Total project cost			€ 320.0 r	€ 320.0 million			
Financing by the Region in the total amount of the project			23.3%	23.3%			
2018 financing by the green and sustainability bond			€ 0.8 mill	€ 0.8 million			
History of project financing by previous	green and respons	sible regional bo	rrowing				
	2014	2015	2016	2017 € 1.0 M	2018 € 0.8 M		

# ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- The project consists of electrifying the "Paris-Troyes" railway line and concerns the 128 km of line between Gretz-Armainvilliers and Troyes and 7 km between Longueville and Provins.
- •The Paris-Troyes line serves the south of the department of Seineet-Marne and that of Aube (Greater East Region), involving economic development issues and offers users in this area better transport arrangements.
- The project reinforces the robustness of the line and will make it
  possible to run all-electric rolling stock (as against currently half diesel
  / half electric stock) more environmentally conscious and with greater
  capacity.

• Partners involved: the project owner (SNCF Réseau), Île-de-France Mobilités and other financiers (State, Grand Est Region, Seine-et-Marne Department, Aube Department, Troyes Champagne Métropole, Cities of Troyes, Community of Nogentais communes, Community of Portes de Romilly communes, City of Nogent-sur-Seine, City of Romilly-on-Seine).

#### ► PROJECT LIFECYCLE

•The first major construction projects will begin in April 2019. This work will involve the demolition of the Bouchots tunnel and work on road bridges.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	2,272 FTEs	A-2
Number of beneficiaries of the project	4,400,000	D-12
CO2 avoided by the project	50,000 CO2 teq/year	E-6
Internal project profitability rate	2,5%	F



Environmental management and eco-design	<ul> <li>SNCF, project owner, is committed to an environmental quality approach, through the implementation of an environmental management system for works: Environmental Assurance Plan (EAP), detailing all the precautions relating to the preservation of the environment during the work; Environmental site monitoring (environmental coordinator in project management, environment manager at the companies) and follow-up measures.</li> <li>The very nature of the electrification project for the existing line means that its environmental impact is generally low and generally localized to the work areas (Fixed Electric Traction Installation, structures). From time to time, the client has adapted certain structures to create passages for wildlife.</li> </ul>
Combating climate change, and promoting the Region's environmental transition	The project will reduce pollution (use of electrical rolling stock), with estimated savings of around 50,000 teq CO2 per year.
Sustainable regional planning and improving quality of life	<ul> <li>The electrification project will improve the quality of life of the users of the regions concerned: improvement of the quality of service and regularity of trains.</li> <li>The project will allow the renewal of rolling stock with modern, efficient trains.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>The project contributes to a better service of the regions near the Paris-Troyes line and will encourage the development projects around the stations, thus allowing increasing density in these areas and reducing urban sprawl.</li> <li>In terms of solidarity, this line will be integrated with the pricing in force in Île-de-France, set by Ile-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.</li> </ul>
Respect for fundamental rights	<ul> <li>Respect of the fundamental rights of workers who work on the site, in particular by ensuring their safety and by respecting the legislation for the health protection.</li> </ul>
Responsible regional development	<ul> <li>The classic Paris-Troyes line remains the only rail link for the population centres located between Paris and Vesoul. Its role of regional and interregional services between the capital, the east of the Paris basin and Champagne-Ardenne is thus enhanced.</li> <li>The line also allows the circulation of freight trains and the servicing of business activities located along the line between Paris and Troyes. It serves construction projects: Greater Troyes Reference Activities Park and the extension of the Port of Nogent-sur-Seine.</li> </ul>
Regional economic development	Based on current estimates, the project will create 2,272 FTEs on site.
Fair practices, responsible purchasing and responsible supplier relations	Subsidies from the Region granted to the Contracting Authorities, themselves (SNCF in this case) subject to the Public Procurement Code.
Consultation with stakeholders	<ul> <li>Prior consultation was organised between March and July 2011.</li> <li>The public inquiry took place between 2 April and 3 May 2013 and the Statement of Public Interest, covering the entire project, was published on 27 January 2014.</li> <li>Implementation of information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures and a dedicated website.</li> </ul>

Dedicated website: http://www.electrificationparistroyes.fr/



# TZEN 4

#### **NEW PROJECT**

# Example of project from the scheme Development for buses on own sites and layout of roadways















Purpose New bus line between Viry-Châtillon and Corbeil-Essonnes	
Locations Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Evry, Corbeil-Esson	
Key dates	Works starting in 2020
Total project cost	€ 124.0 million
Financing by the Region in the total amount of the project	49.0%
2018 financing by the green and sustainability bond	€ 4.0 million

#### ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- •The T Zen 4 project consists in creating a public transport infrastructure on a clean site between Viry-Châtillon and Corbeil-Essonnes. It will replace the current 402 line on the section between "La Treille" at Viry-Châtillon and the RER D station at Corbeil-Essonnes, by integrating mainly on the existing Tronçon section which extends on about 14,3 km and serves 30 stations with a frequency of 4 minutes during rush hours.
- •When commissioned, the T Zen 4 will also borrow "ouwn" site sections completed as part of the urban projects crossed (Grande Borne and ZAC Centre-Ville at Grigny and ZAC de la Montagne des Glaises at Corbeil-Essonnes).
- •The Zen T 4 will also be part of the urban projects of the priority neighbourhoods identified in the New National Urban Renewal Program (NPNRU). Several districts of national or regional interest will be served directly by the T Zen 4 (Tarterêts at Corbeil-Essonnes, Pyramides at Evry, Plateau at Ris-Orangis, Grigny 2 and La Grande

Borne at Grigny, Plateau at Viry-Châtillon) thus contributing strongly to limiting their isolation from the territory and its economic dynamics. The success of the T Zen 4 project in these neighbourhoods is a priority for the Region, which has chosen to invest specifically in it through a framework policy, which was passed on 26 January 2017 for urban development and in support of the NPNRU (CR 2017–06).

•Partners involved: project owner Île-de-France Mobilités and other funders (State and Essonne Département).

#### ▶ PROJECT LIFECYCLE

•Commissioning scheduled for 2021.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	880 FTEs	A-2
Number of beneficiaries of the project	47,000	D-6
Internal project profitability rate	16,7 %	F



Environmental management and eco-design	<ul> <li>Consideration for environmental issues (noise, air, water, biodiversity), e.g. restitution of impacted trees.</li> <li>Work phase procedure to refine.</li> </ul>	
Combating climate change,	The project promotes the continuity of soft mobility and frees itself from the constraints of traffic congestion responsible for major irregularity issues to provide a real alternative to the use of the car.	
and promoting the Region's environmental transition	<ul> <li>The T Zen 4 project requires only very limited consumption of natural areas likely to house protected species. The impact study of the project concludes that there is no residual impact on the natural environment, after the implementation of avoidance and reduction measures.</li> </ul>	
	No wetlands in the project area.	
Sustainable regional planning and improving quality of life	<ul> <li>The layout of the Zen T 4 crosses a dense and heterogeneous urban fabric, not only from the point of view of the typology of constructions but also from the point of view of their quality. The project is an opportunity to renew aging plant structures, restore a more human-scale urban language, restore fringes and enhance perspectives.</li> </ul>	
	<ul> <li>Setting up of comfortable public spaces, which favour the soft and pedestrian mode: pedestrian continuity, pavements not too narrow, restitution of plantations and parking.</li> </ul>	
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>This project thus promotes the opening up of the territory and fully subscribes to an effort to fight against inequalities between territories.</li> </ul>	
Respect for fundamental rights	<ul> <li>By promoting intermodality and a better coverage of the territory, this project promotes the right to come and go.</li> </ul>	
	<ul> <li>Strengthening the attractiveness of this sector promotes its economic development.</li> </ul>	
Responsible regional development	<ul> <li>Upgrade the 402 line towards a more efficient mode between the "La Treille" station at Viry-Châtillon and the Corbeil-Essonnes RER station.</li> </ul>	
	<ul> <li>Consolidate and develop intermodality with existing (RER D, T Zen 1) and planned (Tram-Train 12 Express) transport lines.</li> </ul>	
Regional economic development	The project is a catalyst for the development of the sector, by opening up poorly connected neighbourhoods and increasing the attractiveness of the served corridor, and more broadly to all municipalities concerned by the project.	
	Support for works-related jobs.	
Fair practices, responsible purchasing and responsible supplier relations	Subsidies from the Region granted to the actual project owners subject to the Code des Mar Publics (public procurement code).	
	<ul> <li>Prior consultation from 17 October 2010 to 2 December 2011, which defined the insertion according to the layout and location of the Maintenance and Storage Site (SMR).</li> </ul>	
Consultation with stakeholders	• Public survey from 30 May to 4 July 2016.	
	Statement of public utility on 8 December 2016.	
	<ul> <li>Numerous exchanges with the local players as part of the project management, which made it possible to develop the project (layout, stations, SMR, etc.).</li> </ul>	

Dedicated website: http://www.tzen4.com



# **RAILWAY STATION OF SAINT-DENIS**

# Example of project from the scheme Master plan for accessibility



Purpose			Accessib	Accessibility of the train station		
Locations			Saint-De	Saint-Denis		
Key dates			Commen	Commencement of work: mid-2018; Projected commissioning: end-2021		
Total project cost			€ 65.5 m	€ 65.5 million		
Financing by the Region in the total amount of the project			25.0%	25.0%		
2018 financing by the green and sustainability bond			€ 2.0 mi	lion		
History of project financing by previous g	History of project financing by previous green and responsible regional borrowing					
	2014	2015	2016	2017	2018	
	<del>-</del>	<del>-</del>	<del></del>	<del></del>	<del></del>	•
		-	€ 1.8 M	€ 1.8 M	€ 2.0 M	

#### ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- •The accessibility of Saint-Denis station is a complex project that involves the complete raising of the platforms by 92 cm to eliminate the gap when getting on the train, the creation of a new underpass under the platforms with the installation of escalators and lifts, the installation of shelters on the platforms and the upgrading of railway station equipment, signage, pathways.
- •This project is part of the Accessibility Master Plan, which aims to ensure the accessibility of public transport services and networks to people with reduced mobility through the progressive implementation of appropriate measures. Of the 390 which make up the Île-de-France rail network, 143 are to be made accessible in this context. Partners involved: project owners (SNCF Réseaux and SNCF Mobility) and Île-de-France Mobilités.

#### ► PROJECT LIFECYCLE

 In 2018, the block diagram studies were finalized and the work for preparing access could be initiated.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	413 FTEs	A-2
Number of beneficiaries of the project	90,000	D-4



Environmental management and eco-design	The elements remodelled within the stations are subject to an HQE approach (eco-respondanterials in particular) and optimal integration in existing sites.	
Combating climate change, and promoting the Region's environmental transition	The program aims to create favourable conditions for a modal shift from private cars to public transport lines for mobility-impaired users.	
Sustainable regional planning and improving quality of life	<ul> <li>The project will help to improve the environment of the stations impacted for everyone: new platforms, installation of elevators or escalators.</li> <li>Saint-Denis station is an important transport hub, as it notably connects to trams T1 and T8. As a consequence, this project will benefit all public transport users.</li> </ul>	
	<ul> <li>The program is in line with the objectives of the law 2005-102 of 11 February 2005 on "Equal rights and opportunities, participation and citizenship of persons with disabilities". It aims to make stations accessible to persons with disabilities.</li> </ul>	
Socially inclusive development, combating inequality, and promoting the safety of individuals	• The aim is to make the station accessible to the handicapped from the main square to the platforms served by the Transilien D and H lines, with an adaptation of the station's equipment (sound system, lighting).	
	<ul> <li>Maintaining good safety conditions by adapting the facilities to the flow of passengers, especially when evacuating platforms.</li> </ul>	
	• Installation of a lift in the travellers' building.	
	• Lifting of platforms so that the disabled can get on trains by themselves.	
Respect for fundamental rights	<ul> <li>As part of its implementation, the project respects the fundamental rights of workers who work on the site, in particular by ensuring their safety and by respecting the legislation for the health protection.</li> </ul>	
Responsible regional development	• Saint-Denis station interfaces with urban projects, notably "Gare Confluence", which will bring in additional flows of travellers.	
Regional economic development	• The accessibility of transport networks to people with reduced mobility encourages their integration into employment and their participation in the economic dynamism of Région Île-de-France	
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Subsidies from the Region granted to the actual project owners (SNCF Réseau and SNCF Mobilités) subject to the Code des Marchés Publics (public procurement code).</li> </ul>	
Consultation with stakeholders	<ul> <li>Each project is subject to the legal obligations of prior consultation with the public.</li> <li>During the works phase, information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures and a dedicated website.</li> </ul>	

Dedicated website: http://www.amenagement-gare-saint-denis.fr/





# RENEWABLE ENERGY AND ENERGY-EFFICIENCY



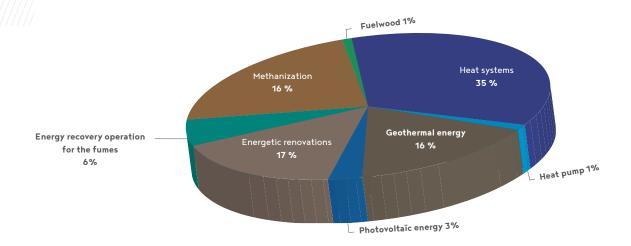
Projects contributing to the development of renewable energy and energy efficiency

- Region's jurisdiction: shared with all public players in the territory.
- Forms of intervention: territorialised actions to integrate environmental policies into land-use planning projects; grants to the local communities submitting the projects.
- □ Target audience: residents of the Île-de-France area.

# Example of actions conducted in 2018:

- > Completion of 2 geothermal boreholes at the Dogger
- > Installation of a heat pump on a table
- > Completion of 5 operations for the creation extension of heat networks
- > Completion of an energy recovery operation for the fumes of a garbage incineration unit

#### **BREAKDOWN OF SUSBSIDIES PAID IN 2018**



# GEOTHERMAL ENERGY AT LA COURNEUVE NEW PROJECT

# Example of project from the scheme Energy policy and transversal actions













( <u>)                                    </u>	
Purpose	Construction of a new borehole and installation of the heat pumps
Locations	La Courneuve
Key dates	Start date of project: 24 July 2017 ; End date of project: 1 April 2018
Total project cost	€ 7.5 million
Financing by the Region in the total amount of the project	24.5 %
2018 financing by the green and sustainability bond	€ 1.1 million

# ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- •The project is part of the regional strategy for combating climate change and developing local renewable energies, in order to limit the region's dependence on fossil fuels and reduce the energy bill for Îlede-France residents.
- •The construction of the new borehole is accompanied by the implementation of a heat pump and a 650-ml densification project for the La Courneuve heat network. The project will supply 618 housing equivalents for needs estimated at 4,065 MWh. The coverage of these needs will be provided by the existing production facilities, as well as the new borehole and the new heat pump.
- •The installation of the heat pumps makes it possible to maximize the geothermal energy that can be used and allow the SMIREC (joint syndicate of the heat energy networks) to ensure the supply of domestic hot water at 60°C without decentralized electrical support, as was the case so far in the mid-season and summer (the temperature at the wellhead being between 56°C ("south" doublet) and 59°C ("north" doublet).

#### ► PROJECT LIFECYCLE

#### • GLCN4 borehole:

- November and December 2017: GLCN4 borehole, installation and cementing of casings.
- December 2017: end of the drilling and tests.
- March to May 2018: connection of the GLCN4 well to the geothermal plant via a partly underground pipeline.
- Commissioning of the facility on 6 June 2018.

#### • Heat pump:

- October 2018: beginning of civil works for building construction and high voltage electrical works.
- March 2019: start of hydraulic and low voltage electrical work.
- 2nd quarter of 2019: commissioning of the facility.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	53 FTEs	A-2
Number of beneficiaries of the project	17,701	D-7
CO2 avoided by the project	2,270 CO2 teq/year	E-3



Fi	Taking account of nuisances on the site.		
Environmental management and eco-design	Waste treatment in the appropriate channels.		
una eco acoign	Water treatment to preserve the quality of the resource.		
	Use of products as recyclable as possible or not harmful to the environment.		
Combation disease shows	Project seeking to develop local renewable energies.		
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Expected energy savings equivalent to 2,270 teqCO2 per year (considering a coefficient gCO2/kwh-PCI of 206 and a coefficient gCO2/kwelec of 80).</li> </ul>		
environmental transition	<ul> <li>Improved air quality, with an expected reduction of 0.7 tonnes of SO2 of NOx per year (considering a coefficient mgNOx/kWhPCI of 55).</li> </ul>		
Sustainable regional planning	<ul> <li>Project enhancing the exploitation of local resources (DOGGER aquifer).</li> </ul>		
and improving quality of life	• 7,000 homes will benefit from geothermal energy.		
Socially inclusive development, combating inequality, and promoting the safety of individuals	Stable energy loads for connected homes.		
Respect for fundamental rights	<ul> <li>Promotes access to renewable energy, helping to support the living standards of households in favour of a constant improvement of their living conditions.</li> </ul>		
Responsible regional development	<ul> <li>Project contributes to reinforcing the weight of renewable energies in Île-de-France and geothermal energy in particular, which is a Parisian specialty: nearly 50 facilities are being operated, supplying more than 200,000 equivalent housing units. This is the first European region in terms of numbers of facilities.</li> </ul>		
Regional economic development	Support the momentum of renewable energy development in the region.		
Fair practices, responsible purchasing and responsible supplier relations	Application of the Public Procurement Code by the project representative.		
	Extended information and consultation procedure for all subscribers.		
	Public inquiry at the time of filing of a research permit.		
Consultation with stakeholders	Implementation of a master plan, a tool for managing the network in the medium and long term.		
	Association those who monitor the project's operations.		
	Users Committee.		
<del>                                      </del>	•		



# **BIODIVERSITY**



Region's jurisdiction: The Region co-developed the SRCE (Regional ecological coherence scheme) with the state.

improve the accessibility of the nearby green spaces.

Forms of intervention: Territorialised actions to integrate environmental policies into land-use planning projects; subsidies to the project contracting authority and the Agence des Espaces Verts (AEV), regional public institution.

sionals and associations, with a simple objective: to achieve the net creation of green areas in Île-de-France by 2021 and

Target audience: The contracting authorities submitting the projects, such as, for example, municipalities and their associations, départements, associations specialising in nature, professional associations.

# LA TÉGÉVAL NEW PROJECT

# Example of project from the scheme Acquisition and development by the Green Spaces Agency















Purpose	Creation of a green belt over 20 kilometres	
Locations	Cities of Créteil, Limeil-Brévannes, Mandres-les-Roses, Marolles-en-Brie, Santeny, Valenton, Villecresnes, Yerres (Val-de-Marne et Essonne)	
Key dates	Work kicked off in 2013, accessibility of the entire linear structure by the end of 2020, completion of the development by 2030	
Total project cost	€ 60 million	
Financing by the Region in the total amount of the project	60.0%	
2018 financing by the green and sustainability bond	€ 1.8 million	

# ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- •Initiated by Région Île-de-France and the Val-de-Marne Departmental Council in the 1990s, Tégéval is a compensation to the TGV high-speed interconnection line.
- •The project involves the creation of a 20-kilometer green corridor, covering an area of 96 hectares. Tégéval will connect parks, forests and green links to the public transport and bicycle paths over the territory. Throughout the course, amenities will allow visitors to fully enjoy nature while preserving biodiversity.
- \*The Region entrusted the conduct of studies and development as well as the acquisition of land to the Agence des espaces verts (AEV). The joint study and completion organisation (SMER) Tégéval, which associates Région Île-de-France, the Agency of green areas (AEV) of Région Île-de-France and the Val-de-Marne Département, was created in 2008 to oversee the project (studies and development works); it is composed of 20 regional and departmental elected representatives. A team of technicians from the AEV and the Val-de-Marne départment is assigned to the project and ensures its administrative and technical management.

#### ▶ PROJECT LIFECYCLE

- 2013: declaration of public utility and launch of the works.
- 2014: inauguration of the first phase of the works: 1.3 km of green corridor, along which were planted 339 trees and 11,000 shrubs.
- 2016: inauguration of the bridge on the RN 406, a 240-meter long structure allowing the crossing of the road by soft mobility.
- 2018: approval of the signage charter by the SMER syndicated council, beginning of the "Paris-Bastille" (creation of a new footbridge to restore the continuity of the former railway right-of-way) and "Ballastière" (requalification of a degraded wasteland in a 750-meter green track section) operations.
- \*2019: early deployment of the signage, delivery of the "Paris-Bastille" and "Ballastière" operations.
- •By 2020: materialisation of the physical continuity over the entire linear section of the project.

Indicator	Impact	Methodological note	
Number of beneficiaries of the project	90.000	D-6	

Environmental management	<ul> <li>AEV's commitment to biodiversity when carrying out the works and to carry out low-disturbance building sites.</li> </ul>
and eco-design	<ul> <li>Objectives of limiting soil compaction; recover, store and re-use excavated soil on site; respect for so in order to preserve the existing seed bank; to limit noise pollution and maintain cleanliness around the site.</li> </ul>
	Strong penalties applied for damage to trees during the construction phase.
Combating climate change, and	<ul> <li>The landscaping of the green corridor is the subject of an innovative and ecologically exemplary ap proach: native and spontaneous vegetation is favoured, the natural environments are restored or rein forced for the benefit of the fauna and the local flora.</li> </ul>
promoting the Region's environmental transition	<ul> <li>Renaturation strategies inspired by plant engineering techniques for the treatment of anthropised environments.</li> </ul>
	Arrangements promoting the practice of active mobility.
	<ul> <li>Enhancement of the landscape of the site with very good potential in a dense urban situation by giving back clarity and security, by improving its quality of public facilities.</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Improvement of the reception of the public through the development of recreational equipment throughout the Tégéval: playgrounds, sports facilities, shared gardens</li> </ul>
	<ul> <li>Objective to offer the public an area for fresh air and walking, recreation and quality games in municipality lacking in green and wooded areas.</li> </ul>
Socially inclusive development, combating inequality,	<ul> <li>Ensuring the safety of developed areas: quality lighting in urban areas, handling of intersections wit roads.</li> <li>Soil remediation when necessary.</li> </ul>
and promoting the safety of individuals	Accessibility of the entire structure ensured for people with reduced mobility.
Respect for fundamental rights	Opening green spaces to the public for constant improvement of people's living conditions.
Responsible regional development	<ul> <li>Tégéval's ambition is to create a 20-kilometer long green corridor, which will be a route between th city and the countryside, linking parks, forests and green links to the area's public transport and bicycl routes.</li> </ul>
Regional economic development	Boost to employment during the construction phase and for the operational management of the site
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>All work complies with the public procurement code.</li> <li>PEFC or FSC certification for wood used in development work.</li> <li>Label "true local grainland" or equivalent requested in the special technical specification.</li> </ul>
Consultation with stakeholders	The eight municipalities located on the route and their intercommunalities are associated with the project through the Cities Consultation Committee. In order to perpetuate the development, they are in charge of part of the maintenance of the Tégéval in support of the Val-de-Marne Département. The development made are the subject of public meetings prior to the Jaunch of the works places.
	developments made are the subject of public meetings prior to the launch of the works phases.

Dedicated website: https://www.lategeval.fr/



# MARNE RIVERBANK AT THORIGNY-SUR-MARNE AND DAMPMART | NEW PROJECT

# Example of project from regional strategy Protection and biodiversity















Purpose	Reconstitution of the Marne riverbank's ecological continuity	
Locations	Dampmart and Thorigny-sur-Marne	
Key dates	Works launched in 2017, completion expected in 2020	
Total project cost	€ 4.3 million	
Financing by the Region in the total amount of the project	8.1%	
2018 financing by the green and sustainability bond	€ 0.3 million	

#### ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- •Regaining the Marne banks is a priority for the Marne and Gondoire Agglomeration Community (developer of the project) and its municipalities who wish to restore the environment, highlight the Marne throughout its linear structure and open it to the public. It is part of the dynamics of the Marne Brosse and Gondoire Territorial Coherence Scheme and is at the heart of the blue frame identified in the SCoT's Goals Orientation Document (DOO). In addition, the towpath is listed as a "leisure route" to the master plan of the Marne and Gondoire soft mobility connections.
- The project is on the right bank of the Marne river and covers 3.4km of riverbanks from the tip of the Dhuis aqueduct on the Marne at Dampmart (upstream of the project) to the Thorigny Marne wharf (downstream of the project). It is divided into five sectors. Depending on the sector, there is provision for backfilling, stabilization of the banks by mixed plant engineering, removal of hardcocking replaced by integral plant engineering, removal of rockfill and concrete slope

protections, sloping in the clearings, reconstitution through plant engineering of a natural bank and a helophyte beach opening up the space on the Marne river. Finally, works are also planned to create a strolling continuity for pedestrians (on public and private properties with DUP procedure: destruction of fences, gates, access works cutting the bank) with a 1.5 m wide path and permeable natural gravel flooring with wooden decking here and there.

#### ▶ PROJECT LIFECYCLE

- •Course of 2017: beginning of the works.
- •Completion expected in 2020 (large linear construction, works dependent on the seasons and in particular the height of the Marne).

Indicator	Impact	Methodological note	
Number of beneficiaries of the project	102,090	D-6	



Environmental management and eco-design	<ul> <li>Application for authorization / declaration relating to "law on water" procedures.</li> <li>Carrying out a survey prior to the rehabilitation of the banks to make a choice of a scenario combining activities, ecological protection of the banks, quality of the banks and enhancement of the site for residents and the public.</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Recomposition after removal of concrete sections of banks, positive to biological habitats (aquatic and on land) of particular ecological interest.</li> <li>Promote optimal diversification of riparian vegetation in order to promote the ecological value of the environment (improvement of biodiversity).</li> <li>Improve the attractiveness of this section of bank for the animal and particularly fish populations.</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Improvement of the attractiveness and the attendance of the banks of Marne.</li> <li>Contribution to the SCoT's goal N°1, namely "Sustain and enhance the natural and agricultural potential" which has resulted in the establishment of a Perimeter for the Protection of Natural and Peri-Urban Agricultural Areas (PPEANP) in the Marne and Gondoire area with the support of the Département, whose 3rd goal is to "perpetuate, even create, great ecological continuities, ecological corridors".</li> <li>Implementation of the objectives set out in the Perimeter of Protection and Development of Peri-Urban Agricultural and Natural Spaces (PPEANP) of the Marne and Gondoire Urban Community and those of the Master Plan for the Soft Mobility Connections of Marne and Gondoire.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>Promotion of access to the Marne and response to all the issues previously identified with all the partners and people concerned, namely ecological, tourism, social, historical and regulatory issues.</li> <li>The interconnection of the route with the existing facilities will improve relations between the territories.</li> </ul>
Respect for fundamental rights	This project was the subject of an environmental and health analysis of the impacts of the project as part of a public inquiry.
Responsible regional development	Development of public access to the Marne.
Regional economic development	Strengthening of the attractiveness of the territory.
Fair practices, responsible purchasing and responsible supplier relations	Application of the public procurement code by the project owner.
Consultation with stakeholders	Project has been the subject of consultations with all the technical players: State services, Department, Region, Water Agency, under the Marne-Confluence Basin Contract.



# SOCIAL INITIATIVES AIMED AT HELPING VULNERABLE POPULATION GROUPS



Development of the home offers and projects to improve the accessibility of buildings and infrastructure for vulnerable populations

The Region makes investments for vulnerable publics, for example by supporting construction and/or renovation projects for women in difficulty and for persons with disabilities. The Region has also put in place territorialized actions, which make it possible to take disability-related issues into concerted spatial planning policies in a transversal manner.

- Region's jurisdiction: optional.
- © Forms of intervention: territorialised actions integrated into concerted spatial planning policies with other public authorities; subsidies for the contracting authorities.
- □ Target audience: vulnerable public.

# L'ESPOIR, MEDICO-EDUCATIONAL INSTITUTE - L'ÎLE-ADAM



Example of project from the scheme Social actions



















Purpose	Rehabilitation works of the institute
Locations	L'Isle-Adam
Key dates	Launch of rehabilitation works in July 2015
Total project cost	€ 3.5 million
Financing by the Region in the total amount of the project	27.5%
2018 financing by the green and sustainability bond	€ 0.8 million

#### ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- $^{ullet}$  The aim is to modernize the "L'espoir" medical-educational institute (IME) for children with disabilities to better meet their needs.
- Promote the care of children and teenagers with disabilities through better accessibility of buildings, which also facilitates working conditions for staff.
- The surfaces cleared by these works will provide a dining area, a dining room, a large inner courtyard and three reception halls suitable for children, offering them new prospects for autonomy.

# ▶ PROJECT LIFECYCLE

•Launch of rehabilitation work in July 2015

Indicator	Impact	Methodological note
Number of beneficiaries of the project	80	D-8



#### JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and eco-design	• The project meets the requirement to reduce the building's environmental impact. The end goal is 50% reduction and consumption of less than 150 Kwep / m² / year.
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Replacement of single glazed wooden windows with modern isolating joinery.</li> <li>The installation of suitable toilets and showers, replacing the existing equipment, allowing for considerable water savings.</li> <li>Upgrading of the electrical installation to save electricity.</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Redevelopment which will allow the creation of new outdoor and indoor activity areas, for improved reception and living conditions.</li> <li>Creation of a new dining area.</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	The project is an opportunity to hire people with employment difficulties, with the implementation in works contracts of a minimum objective of 6% of hours of employment reserved for people encountering particular difficulties in getting jobs.
Respect for fundamental rights	This project falls within the framework of the law no. 2005-102 of 11 February 2005 for equal rights and opportunities, the participation and the citizenship of handicapped persons.
Responsible regional development	<ul> <li>This is a project that responds to a lack of accessibility in the territory.</li> <li>The project will make it possible to sustain crucial equipment for the families concerned and for the Val-d'Oise departement.</li> </ul>
Regional economic development	Employment maintained within the IME, and more broadly for better support for working parents.
Fair practices, responsible purchasing and responsible supplier relations	Payment of supplier's dues as soon as possible.
Consultation with stakeholders	Consultation between players.





In addition to supporting the new offer of social family housing for young people and students, the regional policy implemented since 2016 also aims to revive the creation of intermediate housing for the middle classes. The point here is to overcome the difficulties met by the middle classes to find housing in Île-de-France and to work in favour of greater social diversity. In total, in 2018, regional aid helped support the construction of 8,153 new social housing units (of which 957 PLS), 1,657 student housing units (i.e. 1,751 spaces) and 423 housing units for young people and apprentices (i.e. 465 new places).

- Region's jurisdiction: optional.
- Form of intervention: subsidies to social contracting authorities, mixed economy building companies, associations and organizations approved for the integration contracting authority, local communities and their groups, as well as local government-controlled companies.
- Target audiences: households with a level of income which makes them eligible to apply for transitional or social housing.

#### SOCIAL HOUSING AT NEUILLY-SUR-MARNE

#### **NEW PROJECT**

#### Example of project from the scheme Support for social housing













Purpose	Construction of 117 new housing units
Locations	Neuilly-sur-Marne
Key dates	Building permit obtained on 4 November 2016, regional funding voted on 18 October 2017, delivery in May 2019
Total project cost	€ 18.6 million
Financing by the Region in the total amount of the project	3.1%
2018 financing by the green and sustainability bond	€ 0.3 million

#### **▶** QUALITATIVE PRESENTATION OF THE PROJECT

- Construction of 117 social rental housing units in Neuilly-sur-Marne with the implementation of an environmental certification process.
- •Connection to a heat network that uses geothermal energy.
- •Thermal performance of the construction above the applicable standard (-20%).
- •Implementation of social integration.
- Project management: Efidis social housing company. Public co-funders: Caisse des Dépôts.

#### ► PROJECT LIFECYCLE

• Program delivered on 7 May 2019.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	148 FTEs	A-3
Social inclusion FTEs supported by the project	5 FTEs	В
Number of beneficiaries of the project	311	D-14



### ▶ JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and eco-design	<ul> <li>Project carried out with a Habitat &amp; Environment certification (environmental management, clean site, etc.).</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>Energy performance higher than that set by regulations (thermal regulation -20%).</li> <li>Building connected to the urban heat network with an energy mix (54% geothermal, 19% heat pump, 27% gas).</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Density of the operation consistent with the recommendations of the SDRIF (master plan of Région Île-de-France) aiming at favouring housing that is economical in terms of land consumption and residentially dense.</li> <li>The ground floor of one of the two buildings is intended for the opening of a 16-place childcare centre (not funded by the Region).</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>Creation of 117 new social housing units with regulated rents and controlled charges for people who meet given low income requirements.</li> <li>Social diversity: the program focuses on "intermediate" housing in a municipality with a high proportion of social and highly social housing.</li> </ul>
Respect for fundamental rights	Provides access to a home with dignity, whose rent corresponds to the tenant's resources.
Responsible regional development	The project is located near a primary school, sports facilities and a park.
Regional economic development	The project helps support the creation of jobs related to the site.
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Transparent grant application process, based on the eligibility criteria clearly explained in a framework discussion accessible to all.</li> <li>Professional employment clauses in the public contract.</li> </ul>
Consultation with stakeholders	<ul> <li>The file and the award proposal were submitted to a thematic committee and the object of a vote by the Regional Council's standing committee.</li> </ul>

#### SOCIAL AND STUDENT RESIDENCE AT VANVES

**NEW PROJECT** 

Example of project from the scheme Support for social housing













Purpose	Construction of 2 residents for students (60 housing units) and for young workers (67 housing units)
Lieux	Vanves. Part of the plot is also located in the town of Issy-les-Moulineaux
Key dates	Building permit obtained on 30 January 2016, regional funding voted on 16 November 2016, delivery in April 2019
Total project cost	€ 12.3 million
Financing by the Region in the total amount of the project	15.4%
2018 financing by the green and sustainability bond	€ 1.1 million

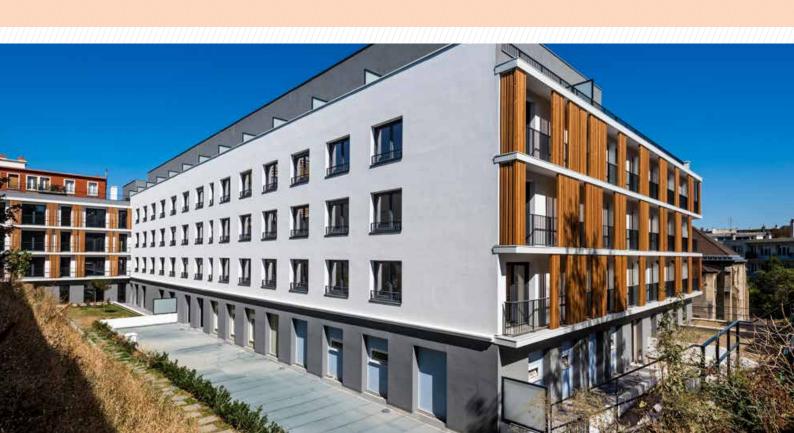
#### ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- Construction of 127 social rental housing units with the implementation of an environmental certification process.
- For the part of the building dedicated to the young workers' residence, implementation of an Effinergie+ certification process.
- •More than 50% of the energy needed to produce hot water is generated by a heat pump.
- •Implementation of social integration.
- Project management: HLM Toit et Joie SA; Public co-funders: State, Département, Agglomeration Community, Caisse des Dépôts.

#### ► PROJECT LIFECYCLE

- Opening of the student residence in February 2019.
- Opening of the young workers' residence in April 2019.
- •Inauguration scheduled for 1 July 2019.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	84 FTEs	A-3
ETP insertion soutenus par le projet	3 FTEs	В
Number of beneficiaries of the project	153	D-2



### JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and eco-design	<ul> <li>Project carried out with a Habitat &amp; Environment certification (environmental management, clean site, etc.).</li> </ul>
Combating climate change, and promoting the Region's environmental transition	<ul> <li>The part of the building dedicated to the young workers' residence is the subject of an Effinergie+ certification scheme which involves a reduction in energy consumption which must be 20% lower than those imposed by thermal regulations (RT 2012).</li> <li>More than 50% of the energy required for domestic hot water is produced by a heat pump (supplement produced by gas).</li> </ul>
Sustainable regional planning and improving quality of life	<ul> <li>Density of the operation consistent with the recommendations of the SDRIF (master plan of Région Île-de-France) aiming at favouring housing that is economical in terms of land consumption and residentially dense.</li> <li>The ground floor of the building is intended for the installation of a day-care centre, a social grocery store and associative premises (not financed by the Region).</li> </ul>
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>Creation of 127 new social housing units with regulated rents and controlled charges for students and young people meeting certain income requirements.</li> <li>Social diversity: the program focuses on social housing and highly social housing.</li> </ul>
Respect for fundamental rights	<ul> <li>Provides access to a home with dignity, whose rent corresponds to the tenant's resources.</li> <li>Promotes access to education for children from modest families.</li> </ul>
Responsible regional development	<ul> <li>The young workers' residence, located near several hospitals, will facilitate the accommodation of young workers and apprentices employed in these hospitals.</li> </ul>
Regional economic development	<ul> <li>The project supports and creates employment in construction.</li> <li>The project will also create 1.2 Full-Time Equivalent for the management of the residences.</li> </ul>
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Transparent grant application process, based on the eligibility criteria clearly explained in a framework discussion accessible to all.</li> <li>Professional employment clauses in the public contract.</li> </ul>
Consultation with stakeholders	<ul> <li>Social project of the association that manages the residences completed in consultation with the social lessor.</li> <li>The file and the award proposal were submitted to a thematic committee and the object of a vote by the Regional Council's standing committee.</li> </ul>



# ECONOMIC AND SOCIALLY INCLUSIVE DEVELOPMENT

Projects contributing to the creation or maintenance of local employment through support to SMEs in the region and the projects of the social and solidary economy.

Assistance to research and innovation by SMEs for the ecological and social transition and the Region's attractiveness.

The regions now have exclusive responsibility in matters of economic development within their territory (law of 7 August 2015 concerning the new territorial organisation of the republic, known by the acronym "NOTRe").

In this context, a new economic strategy called #leader (SRDEII: Regional Strategy for Economic Development Innovation and Internationalisation) was drawn up at the end of 2016 and aims to free and encourage the exceptional potential for growth, jobs and innovation in Île-de-France. It is based on 4 themes: investing in attractiveness, developing competitiveness, developing entrepreneurial spirit and innovating in all territories, and acting collectively at the service of companies, employment and the region. To this end, responding to the environmental stakes meets the objective of identifying all the possibilities in terms of economic activity, employment and innovation, and improving the living environment of Région Île-de-France.

In addition, Région Île-de-France, which also has responsibilities in higher education, research and innovation, adopted in 2017, after a wide-ranging consultation with various audiences (economic actors, researchers and lecturers, students, teachers, trainees of vocational training) its New Regional Scheme for Higher Education, Research and Innovation.

Innovation, quality and excellence are at the heart of this regional strategy, which is structured around major orientations: finding one's path, changing one's path and finding a job throughout life, making the Île-de-France a world reference in science and technology, and supporting world-class universities and campuses in the Region.

- $\mbox{\ensuremath{\square}}$  Region's jurisdiction: mandatory.
- Porms of intervention: grants, endowments, equity participation.
- **Target audience:** SOHOs and SMEs, competitiveness clusters, investment funds for SMEs, funds for interest-free loans, associations of social and inclusive economy.

Two axes of the project financed in 2018 by the green and sustainability bond:

Supporting research and innovation for development and the attractiveness of the Paris Region:

Two schemes financed for  $\bigcirc$ 14.5 million : "support for domains of major interest" ( $\bigcirc$  10.3 million) and "Scientific and technological equipment and platforms - SESAME" ( $\bigcirc$  4.2 million);

Support for social and solidary economics:

Several actions funded for an amount of  $\bigcirc$ 3.3 million under the "Social and solidarity economy" field; Example presented: Scheme to support the micro-credit activity of ADIE ( $\bigcirc$ 0.3 million).

## SUPPORT TO SCIENTIFIC INVESTMENT (DOMAINS OF MAJOR INTEREST AND SESAME)

Example of project to Support research and innovation

1 NOPOWERTY	3 SOCOHEALTR AND WELL-SENS	6 CLEAN WATER AND SANDANIATION	7 APPORTABLEAND	В ресект моех	B INDUSTRY, INNOVATION AND	10 MEQUALITIES	11 SUSTAMABLE CITIES AND COMMUNICATION	12 RESPONSIBLE CONSUMERTION	13 come

Purpose	Support to domains of major interest (DIM) - Support to scientific teams for the acquisition of experimental resources (SESAME).
Targeted economic players	Higher education and research establishments – public and non-profit private sector
Total project cost	€ 14.5 million
2018 financing by the green and sustainability bond	€ 14.5 million

#### ▶ QUALITATIVE PRESENTATION OF THE PROJECT

- •Through the DIM and SESAME schemes, the Region aims to support innovative research projects conducted by research laboratories in the Paris region, that require significant expenditures for the purchase of equipment.
- •With 40% of the national potential of public research and more than 135,000 people, all major social, economic and environmental issues are represented in Île-de-France. Most of the proposed research projects aim to improve the understanding of scientific phenomena that have a direct impact on Mankind or the improvement of existing techniques.
- •The environment, the quality of life and health have been steady themes for over 20 years in the regional science policy. Their support has been confirmed since 2017 with the labelling of DIM Respore, ELICIT, 1Health and Gene Therapy, as well as QI<sup>2</sup> Emerging DIMs and Longevity and Aging. Added to this is the SESAME scheme for the co-financing of major scientific equipment.
- •Other co-funders: higher education organizations, research laboratories.

#### **▶ PROJECT LIFECYCLE**

Examples of business creation projects supported:

- •The Pollurisk project funded through the SESAME scheme has been launched. One of the two pieces of equipment has been purchased while the second one is being purchased. The project is expected to begin mid-2019.
- The GRACE project, funded in 2016 through the former DIM R2DS, is in its completion phase. Two spectrometers were delivered at the end of 2018. Only one of the two devices is operational at the moment. Work is underway to be able to use the second one. The first analyses will begin in July 2019. These two pieces of equipment are dedicated to the measurement of rare gases and the dating of ice cores.
- •The EPA project, also funded by DIM R2DS in 2016, is underway. Sensors to quantify the presence of fine particles have been acquired. They are used to quantify the formation of organic aerosols following the addition of residual products to the field. A second instrument will be installed in 2019 to measure particle emissions during tillage or the use of pesticides.
- The DIM Respore, among other things, financed a project for the electro-catalyst test for fuel cells. The test benches were acquired at the end of 2018 and will make it possible to carry out the first tests at the beginning of 2019.

Indicator	Impact	Methodological note
Number of beneficiaries of the project	74	D-10

### ▶ JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and eco-design	<ul> <li>Environmental certifications of many public research laboratories justifying their good practices in particular in the handling of hazardous products.</li> <li>Consideration for the environmental impact in the construction of projects by raising awareness upstream among scientific staff.</li> </ul>	
Combating climate change, and promoting the Region's environmental transition	Main topics of the DIM Respore: renewable energy, environmental science, safety and health / well-being. They invent the materials used in the technologies of tomorrow.	
Sustainable regional planning and improving quality of life	Development of future technologies whether in terms of cleaner energy or health to improve the quality of life of human beings.	
Socially inclusive development, combating inequality, and promoting the safety of individuals	<ul> <li>Networking of research institutions, especially by pooling scientific equipment so that smaller organizations can benefit from the expertise of larger companies.</li> <li>The goal of any public research initiative is to have as many people as possible benefit from technological progress.</li> </ul>	
Respect for fundamental rights	Compliance with French law.	
Responsible regional development	Anticipation of new needs and participation in the dynamics of the territory.	
Regional economic development	<ul> <li>Co-funding of scientific equipment, participation in the economic development of the territory via the co-funding of scientific equipment.</li> <li>Creation of jobs for the maintenance of equipment or the completion of projects.</li> <li>Creation of many innovative start-ups through scientific research.</li> </ul>	
Fair practices, responsible purchasing and responsible supplier relations	<ul> <li>Choice of projects via calls for projects. Decision-making by scientific experts recognized internationa in their field. Selection criteria defined beforehand and known to all.</li> </ul>	
Consultation with stakeholders	<ul> <li>Monitoring of all projects by steering committees and scientific committees where stakeholders, external experts and the Region are represented. This system makes it possible to take into account all the needs of the project leaders.</li> </ul>	

## SUPPORT TO BUSINESS CREATION (ENTREPRENEUR # LEADER)

#### Example of project to Support social and solidary economics









Purpose	Special loans and regional premiums coupled to the ADIE/France Active guarantee found.
Targeted economic players	Public very distant from employment
Total project cost	€ 0.3 million
2018 financing by the green and sustainability bond	€ 0.3 million

#### **▶ QUALITATIVE PRESENTATION OF THE PROJECT**

- •Support for the activities of ADIE, France Active and departmental platforms for loans on trust in order to promote sustainable social inclusion of the public which is very distant from employment: the funding proposed by ADIE facilitates the entrepreneurial activities of members of the public which are overwhelmingly beneficiaries of the minimum socially guaranteed income and have great difficulty accessing bank credit.
- Région Île-de-France has put in place a new Entrepreneurship# Leader 2017-2019 entrepreneurship policy that aims to deploy a local, legible and effective support and financing offer for the 24 employment areas in the Paris region. This offer will include a unique and coordinated path of support and funding. ADIE, France Active and departmental platforms for loans on trust are ones of the selected operators who offer this unique coordinated path of support. Through the aforementioned operators, the point will be to integrate in the best way possible support for the creation / takeover of companies by people who have the most difficulties finding a job.
- •Entrepreneur # Leader breaks down into 3 phases (prior to creation, funding and post-creation). ADIL operators, France Active and departmental loan on trust platforms contribute only to phase 2, i.e. the financing phase, where more than 2,800 beneficiaries were supported, of which 32.5% were women.
- •Long-term accompaniment for supported entrepreneurs: individualised support, meetings with experts, micro-insurance, offers of special deals, creators' directory, a space for micro-entrepreneurs, e-learning videos and online practical guides.
- •The aforementioned operators function in conjunction with other actors in accompaniment or financing of business creation. For example, ADIE relies on 160 volunteers, former heads of businesses that invest in skills. This accompaniment network contributes to the fight against exclusion, reduction of inequalities, prevention of risks relating to health, improvement of living and working conditions.

#### **▶ PROJECT LIFECYCLE**

Examples of business creation projects supported:

PANDOBAC: Pandobac offers a zero-waste delivery service for food professionals to eliminate disposable packaging. It is a system of reusable bins that replaces the disposable transport packaging now purchased and used by wholesalers to deliver restaurants. The service is in the form of a monthly subscription and includes: the provision of ecodesigned bins, their ecological washing, a web and mobile bin tracking app, as well as training and awareness of stakeholders involved in the service.

CocoPlant: CocoPlant offers a range of natural and eco-friendly filtration products for aquariums, based on the shell of the coconut, to which Cocoplant gives a second life. One ought to know that no less than 80 billion of these nuts are consumed in Asia, the hull ending up either as waste or being burnt and turned into coal. CocoPlant therefore offers producers to buy back their hulls (which allows them to get a little more income) to, therefore, filter the aquarium water and avoid having to replace the water. It is not the actual hull that filters it, but the plants and bacteria present in the system, a system directly inspired by the process of aquaponics, but miniaturised.

Valo Consult may intervene for any technical or environmental study of classified facilities for the management and treatment of waste.

Facilities concerned: landfill, sorting-transfer facilities, waste storage facilities, biological processing units, biogas upgrading, etc.

- audit, site diagnosis,
- ICPE engineering, any declaration file, registration, authorization, etc.,
- facility inspections (noise measurements, mapping of diffuse methane emissions)

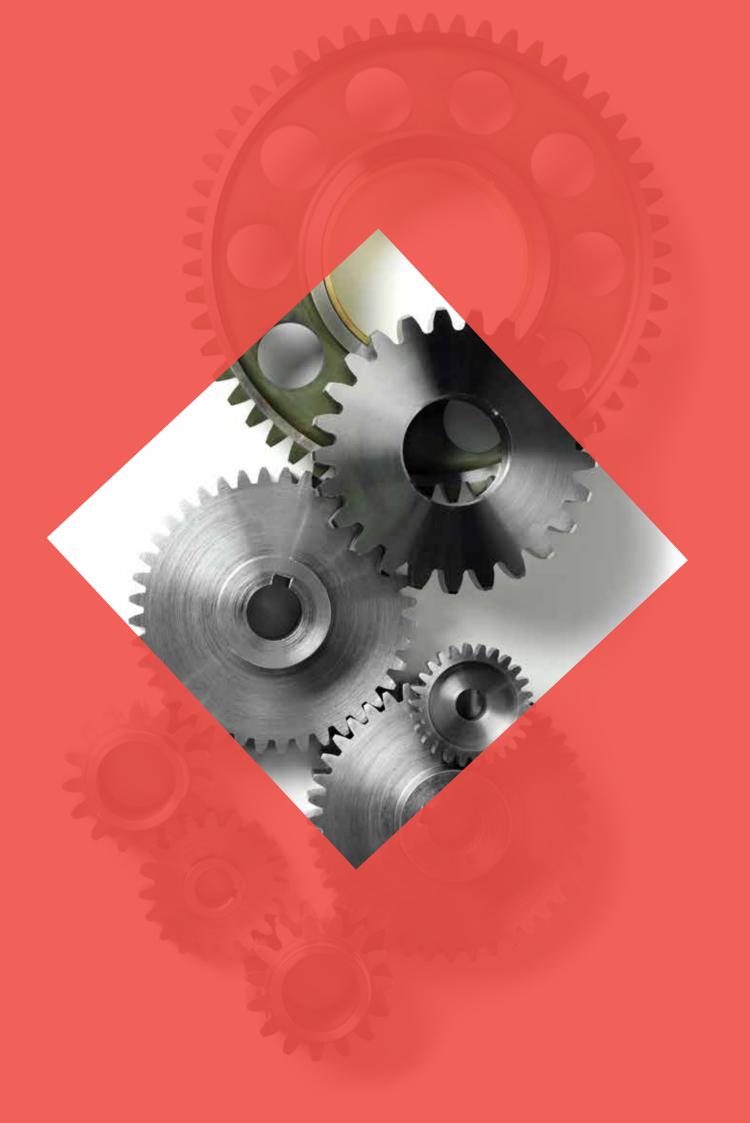
Indicator	Impact	Methodological note
Number of beneficiaries of the project	2,862	D-9

#### ▶ JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and eco-design	<ul> <li>This mechanism does not include a specific environmental approach, but many of the supported entrepreneurs have an environmental project.</li> <li>This mechanism does not include a specific environmental approach, but many of the supported entrepreneurs have an environmental project.</li> </ul>		
Combating climate change, and promoting the Region's environmental transition			
Sustainable regional planning and improving quality of life	Concerning ADIE and France Active:  France Active financing and guarantee tools for social based enterprises and VSEs: 50 Social and Solidarity Economie companie (ESS) and 394 very small companies that benefited from a loan or loan guarantee.  The ADIE loan on trust fund: nearly 1,500 loans on trust have been issued.  Projects which create wealth and social linkages: support for commercial activities, whether mobile or fixed location, and thus participate in maintaining small local firms or the development of new services for the population and businesses.		
Socially inclusive development, combating inequality, (and promoting the safety of individuals)	<ul> <li>2,862 businesses created (and as many jobs created), of which 71% by beneficiaries of the social minimum income, 32.5% by women, 19 % by people above 51 years old, 21 % by less than 30 years old, and 21% individuals aged under 30 and 15.9% individuals from priority neighbourhoods.</li> <li>Sustainable economic integration: 84% of creators have a professional activity and 65.5% still direct their businesses after 3 years.</li> <li>42% are no longer eligible for social minimum income.</li> </ul>		
Respect for fundamental rights	<ul> <li>Right to entrepreneurial initiative for all, equality of opportunity.</li> <li>Combating social and regional inequalities.</li> <li>Fight against exclusion from banking services.</li> <li>Fight against discrimination (equality between males/females, origins, skills: 5% of beneficiaries are illiterate, 15% just know how to read/write/do basic calculations).</li> </ul>		
Responsible regional development	<ul> <li>15.9% of beneficiaries are from the social priority area districts of the region, of which 29% from the Seine-Saint-Denis department.</li> <li>62% reside in an urban zone (reflecting the concentration of activities in Île-de-France.).</li> </ul>		
Regional economic development	<ul> <li>Each creator financed by ADIE, France Active and departmental platforms for loans on trust created an average of 1.2 jobs, for about 3,434 total jobs created in 2018.</li> <li>The survival rate of businesses is 75.5% after 2 years, comparable to the national average.</li> </ul>		
Fair practices, (Responsible purchasing and responsible supplier relations)	<ul> <li>A credit committee meets each week in each department.</li> <li>Credit decisions are given on an as-you-go basis and guarantee fair treatment to applicants.</li> <li>All the counsellors are trained in the fight against discrimination (gender, geographic origins).</li> </ul>		
Consultation with stakeholders	<ul> <li>An annual steering committee gathers all the partners and sponsors.</li> <li>An Annual General Meeting with presentation of the balance sheet and future outlook.</li> <li>ADIE, France Active and departmental lending platforms play a supporting role, with 7,000 contacts and 2,630 appointments</li> </ul>		

Dedicated website: https://www.adie.org/; https://www.franceactive.org/; http://www.initiative-france.fr/; https://www.reseau-entreprendre.org/fr/accueil/







#### 1-1) AMOUNTS DISPLAYED IN THE REPORTING (€ MILLION)

#### a) Total project cost

For operations of construction, renovation, infrastructure, the amount is calculated by the contracting authority(ies) of the project or its delegate(s), after a projected cost estimate to perform the entirety of the operation.

For the scheme presented, the amount represents the totality of 2018 expenditures which took place for each of the schemes (cf. b below for the methodology).

#### b) 2018 financing by the green and sustainability bond "Developpment for buses on own sites"

The amount shows corresponds with total 2018 expenditures related to the corresponding project/scheme. The two exceptions, an amount less than total 2018 expenditures was selected for the scheme. Development for buses on own sites and "Master plan for accessibility", category "Public transport and sustainable transportation".

It should be noted that, with regard to the project regarding the accessibility of the Saint-Denis station, the amount indicated corresponds to the share of the amount of the project financed by the Region, i.e.  $\,\epsilon$ 16.4 million out of a total of  $\,\epsilon$ 65.5 million, divided by the number of years of the programme, i.e. 8 years. Each year, the Region allocates an overall grant under the Accessibility Master Plan, with expenditure on each project being directly managed by the contracting authority.

The amount of expenditures attributable to each project/scheme was controlled by the Control of Management and Systems service (CGSI), within the Pole of Finances of Région Île-de-France.

To do this, the CGSI recovered credits from payouts related to each project/scheme, in the fiscal year corresponding with the reporting year. The identification of the credit payments in question are done through data retrieval tables in the computer of the Institute of International and Strategic Relations (Institut de Relations Internationales et Stratégiques - IRIS). The development of these tables requires selecting a search specific to the project/scheme at the level of: a chapter; a function; a program or budget code; an operation; a scheme; a file; a project.

Once the tables are filled they are cross-checked with the CORIOLIS financial management tool, and then checked with all the departments related to the reporting, to ensure consistency with the amounts financed by each project.

#### 2) METHODOLOGY FOR READING EACH PROJECT UNDER THE LENS OF THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

#### The process followed has been formalized as follows:

✓On the one hand, the projects were assessed against twelve objectives out of seventeen. Indeed, **goals N°2**, **5**, **16 and 17** ("Zero Hunger", "Gender Equality", "Peace, Justice and Strong Institutions" and "Partnerships for the Goals") focus more on the social responsibility of the Region as an institution, than on the nature of the investment projects financed under the green and sustainable bond issue program. Given the geographical situation of Île-de-France, goal N°14 "Life below water - conserving and sustainably exploiting oceans, seas and marine resources" does not concern any project in the Paris region (the preservation and restoration of fresh water and wetland ecosystems fall within the scope of **goal N°15**.

✓On the other hand, some sustainable development goals apply uniformly to all projects eligible for green and sustainable bond, given the project eligibility criteria grid that has been established by the Region (green columns). Thus, each eligible project contributes to the reduction of inequalities and therefore to the struggle against poverty (goals N°1 and 10), economic growth (goal N°8), responsible production (goal N°12), sustainable development of cities and territories (goal N°11), and the fight against climate change (goal N°13, with the exception of the support scheme for business creation).

 $\checkmark$  The contribution of each project to the remaining goals (goals N°3, 4, 6, 7, 9, and 15) is evaluated on a case by case basis, according to the specificity of each project as described in the sheets accompanying this reporting.

With regard to goal N°3 "Good health and well-being", the United Nations scope is essentially concerned with the field of public health. This definition was used to evaluate the contribution of projects to the goal; the elements contained in the reporting relating to well-being in the sense of improving the quality of life have (therefore not been taken into account. Only two investment projects respond directly to public health issues within the meaning of goal N°3, the Region intervening in this field mainly by operating through the management of health and social training).

 $\begin{tabular}{ll} \checkmark For each project, the main sustainable development goal is identified by a double circle: \\ \end{tabular}$ 

#### 3) METHODOLOGIES RELATIVE TO THE IMPACT INDICATORS FOR THE PROJECT PRESENTED

#### A) Worksite FTEs supported by the project

**A-1:** Value of Call for Tenders Excluding Taxes x 43% (BT01 TCE Index) / number of hours worked throughout the construction period. With 1 hour worked = €30 excl. tax and 1,650 hours worked per year.

**A-2:** Method of the National Federation of Public Works: 1 million invested in the public works sector generates 7.1 direct jobs. This ratio is applied to the total amount of the project and thus concerns the entire duration of the project.

**A-3**: Usage of the employment impact ratio of the Ministry of Sustainable Development (11.6 FTE for  $\in$  1 million for works for new construction; 14.2 FTE for  $\in$  1 million for renovation works) applied to the cost of the project as a share of the construction works.

**A-4:** Calculation on the basis of the contract amount exclusive of tax, multiplied by the payroll index, divided by the unit price of the payroll (with 230 days worked on a year of work).

**A-5**: The amount for construction works of € 47,000,000, multiplied by the labour share (25%), added to the average hourly  $\cos t$  (€ 35) over two years of works (with 230 working days per year over two years and 7 hours of work per day). Amount of works communicated by the Company for the Development and Equipment of the Paris Region (Société d'Aménagement et d'Équipment de la Région Parisienne – SAERP). This is equal to the sum of the amount of contracts for works awarded by the Tender Commission and the estimated amount for the Joinery.

#### B) Integration FTEs supported by the project

This is the objective for the hours of integration in the specifications of contracts with businesses.

#### Number of hours of integration =

[Size of market Excluding Taxes X share of workers from the State (from 25% to 60%) X Integration rate (from 5% to 7% depending on the facilitator)]

/ average hourly cost

The number of hours of integration is then converted into Full Time Equivalents (FTEs) based on the number of days worked in the last year (230 days) and the duration of the works.

When the Region is involved in the project as the contracting authority, the monitoring of following these integration clauses is led by the unit of legal affairs and public markets of the Region. Région Île-de-France is supported by facilitators to calculate the hours of integration up to 31/12/2014. Since 1 January 2015, the Region has included in its performing the calculation of hours of integration upstream of the operation in order to have consistency of the calculation across Île-de-France. The theoretical calculation done by the Region is adjusted with the local facilitator in order to account for the offer of integration across the region. The facilitator effectively follows the integration clauses.

When the Region is involved in the project by providing a subsidy, the contracting authority is responsible for calculating the integration clauses and following their proper application in accordance with the specifications made with the contracting authorities.

#### C) Operation FTEs consecutive to the project

- C-1: Estimation of the annual hourly amount of work for maintenance, regulatory checks and cleaning.
- C-2: Estimation or the annual quantity of hours of work for the functioning of the new parts of the project. This estimation is based on the cost of the total wages needed for the functioning of the new parts of the projects, with a total average gross salary of epsilon (average weighted cost of personnel).
- C-3: Number of people working in the facility at 31/12/2017.

#### D) Number of beneficiaries of the project

- D-1: Number of students who will entirely benefit from the project (capacities).
- **D-2:** Number of places per accommodation: for the student residence = 1 per unit; for the social residence = 2 for the 11 T1 bis studios and 1 for the 50 T1 studios.
- D-3: Number of annual visits to the site counted Source: Study of number of visits (MICA Research).
- D-4: Estimation of the number of visits using the traffic modelling (GLOBAL model for RATP and ANTONIN 2 for Île-de-France Mobilités).
- **D-5**: Estimation of usage by model of traffic forecasting model (Transport Union of Île-de-France (Île-de-France Mobilités): ANTONIN 2 (Analysis of Transport and Organization of New Infrastructure Analyse des Transports et de l'Organisation des Nouvelles Infrastructure), based on transportation behaviour observed by the General Transportation Survey carried out in 2001-2002 with 10,500 Île-de-France households.
- **D-6:** Population of the cities concerned.
- **D-7:** Number of housing units or equivalent-units supported by the project, multiplied by the average household size in Île-de-France (2.33 per housing unit, source INSEE).
- D-8: Capacity of the IME (number of places).
- **D-9:** Number of winning businesses for the scheme in 2017.
- **D-10:** Number of businesses and public research establishments having benefitted from a credit allocation in 2017.
- **D-11:** Capacity in cumulated totals.
- D-12: Number of users of the Pline (Paris-Provins via Longueville section) and TER Grand-Est.
- D-13: Measure of actual attendance, adjusted for growth forecasts on employment and population.
- **D-14:** Product of the number of dwellings supported on the project, by the number of tenants according to the typology of housing (assignment standards practiced by the lessors, minimum averages observed: 1.5 people for a 2-room unit; 2.5 people for a 3-room unit; 3.5 people for a 4-room unit and 4.5 people for a 5-room unit).

#### E) CO2 avoided (teq/year) by the project

- **E-1:** Implementation of the methodology of the THCE rules on French thermal regulations. The method consists in simulating, in the design stage, the energy consumption of the construction accounting for its performance characteristics, and comparing to a reference scenario. To do this, the final maximum energy is specified for each regulatory item (heating, cooling, hot water, lighting, auxiliaries), prorated for the primary real energy consumption of each project. They are then converted into final energy, following the regulatory conversion ratios, as a function of the type of energy used (Decree of 8 February 2012 modifying the Decree of 15 September 2006). As high school projects, the calculation is contractually performed in two stages: on the one hand a forecast of the design study performed by the contracting authority, on the other a final figure produced at the end of the construction by the businesses.
- **E-2**: This is the savings in tonnes of CO2 averted on an annual basis due to the use of renewable energies for this construction. For the calculation, the kWh produced by renewable energies used in the construction are 71,057 kWh which includes production of 103,704 kWh of solar thermic for photovoltaics. (Source: Study of overall cost PRO File ANMA/CPR/October 2013).
- E-3: Subtraction between the emissions of CO2 forecast in the sector in the reference scenario and emissions of CO2 forecast in the scenario with implementation of a project for public transportation.
- **E-4:** Theoretical emissions (reference and project) related to the consumption of the regulatory positions of the 2012 thermal regulations (heating, cooling, DHW, lighting, venting auxiliaries, hydraulic auxiliaries). The values for the project come from the PRO phase RT2012 calculation. The reference value is taken according to the maximums authorized by the thermal regulation (Cepmax). CO2 emissions by type of energy are taken according to

ADEME data.

- **E-5:** Comparison between the project that was done (geothermal + hot water pump + gas) and a 100% natural gas solution. Using coefficients of emissions of different sources of energy, the quantity of CO2 averted is the difference between the 2 solutions.
- E-6: Estimation based on the carbon balance methodologies of ADEME and SNCF-Réseau.
- E-7: Information communicated by the project manager

#### F) Internal project profitability rate

The rate is used to calculate the value of the project for the community, by subtracting the costs (investment cots in infrastructure and rotating materials stocks, operating costs) from the benefits (gains in time for users of public transportation; advantages associated with the modal transfer from using an individual car to public transportation: savings from reduced usage of cars, road maintenance and construction of parking spots; savings from externalities: pollution, noise greenhouse gases, accidents).

These costs and advantages are quantified and transformed using a monetary equivalent, in order to calculate the internal rate of return of the project using the following method:

The internal rate of return r' which cancels out the discounted benefits.

The discounted benefits B for the community:

$$B = -I - \sum_{t=1}^{T} \frac{\Delta I_{t0+t}}{(1+r)^t} + \sum_{t=1}^{T} \frac{a_{t0+t}}{(1+r)^t} + \frac{R}{(1+r)^T} \quad \text{with} \quad$$

 $\Delta I_{t0+t}$  the changes in investment (major upkeep) with respect to the reference situation

The economic benefit in the year is calculated by aggregating the changes in utility of different actors with respect to the reference scenario

the discount rate

R

I the envisaged project cost

the residual value of the investment at the end of the period

Environmental management and eco-design			
Vigeo 2016 definition	"The project is implemented in accordance with an eco-design (or eco-construction) approach, and/or an approach aimed at managing its environmental impact (pollution, nuisance, resources, and biodiversity, etc.)"		
Additional definition	The eco-design consists of accounting for the environment from the design of a product or service through all stages of its life cycle. In the context of operations financed by the Region, the eco-design can be understood as accounting for the environment in the scheme falling within the scope of the project, as well as in the operations of the construction when it is an eco-construction.  The environmental management designates the policy and/or methods of management put in places in order to account for the environmental impact resulting from implementation of the project, to evaluate this impact and also to reduce this impact and to also reduce it in relation to the project construction as well as during its operations.		
Possible illustrations	<ul> <li>Process for environmental certifications (BEPOS, HQE, ISO, etc.)</li> <li>Accounting for environmental impacts in the management of the construction site (e.g.: charters, low nuisance sites, green sites, etc.)</li> <li>Integration of environmental concerns in the specifications</li> <li>Recourse to support for the contracting authority devoted to environmental management of the project</li> <li>Explanation of accounting for environmental aspects within the scheme relating to the project</li> </ul>		

Combating climate change, and promoting the Region's environmental transition				
Vigeo 2016 definition	« The project contributes to reducing greenhouse gas emissions, in compliance with the Region's Climate Plan, and/or to the regional environmental transition process, as part of the Regional Economic Development and Innovation Strategy ».			
Additional definition	The project promotes the ecologically-friendly transition of the region by enabling, for example, a reduction in CO2 emissions, savings in natural resources (energy, water, waste, etc.), by promoting the adaptations in consideration of future climate change, by participating in the protection of biodiversity.			
Possible illustrations	<ul> <li>Expected objective to reduce CO2 enabled by the project (with respect to an initial situation observed in the case of renovation or with respect to a reference scenario in the case of a newly constructed building)</li> <li>Use of renewable energies</li> <li>Recovery of rainwater and/or grey water</li> <li>Project design respectful of neighbouring biodiversity</li> </ul>			

Sustainable regional planning and improving quality of life			
Vigeo 2016 definition	$\alpha$ The project is in keeping with the regional sustainable planning strategy, and contributes to improving the quality of life for its users and/or staff $\alpha$ .		
Additional definition	Sustainable planning: the project was conceived with an interest to be qualitatively involved in the region, for example by looking out for good integration of landscaping, balanced density of housing, respect for urban fronts It can also promote the continuity of quiet modes of transportation and incorporate corrective measures linked to nuisances even of the project. Improving quality of life: the project makes it possible to propose a service/product that was not accessible or easily available, or to facilitate the usage of this service/product by residents/users. The project can also be involved in directly improving the well-being of residents/users.		
Possible illustrations	<ul> <li>Integration of the project in the region (planting greenery, presence of green spaces, integration of the building into the urban fabric, etc.)</li> <li>Improvement of quality of life targeted by the project: gains in transportation time, reduction of local nuisances (pollution, noise), well-being (quality of landscaping, dignified housing)</li> <li>Accessibility of a population to a new service</li> <li>Opening a service to a new population (which did not previously have access)</li> </ul>		

Socially inclusive development, combating inequality, and promoting the safety of individuals				
Vigeo 2016 definition	« The project contributes to combating social exclusion, to reducing inequality, or to preventing risks relating to health, working conditions, and/or individuals' safety (users, neighbouring residents, and staff) ».			
Additional definition	The project may promote:  Accessibility of places to all of the public (deaf, blind, handicapped, etc.),  Integration of disadvantaged persons (distant from employment, schooling, access to new information and communications technologies, etc.),  Personal security on the site (video surveillance, security personnel, fire safety measures, etc.),  Participation in development of leisure tourism for all.			
Possible illustrations	<ul> <li>Equipment planned to promote accessibility and/or security.</li> <li>Integration of the project in the renovation/opening up of a district.</li> <li>Health benefits of the project for the persons concerned.</li> <li>Taking into account of social criteria (different rates, fight against exclusion, etc).</li> <li>Definition of a pedagogical program working towards better social integration.</li> </ul>			

Respect for fundamental rights			
Vigeo 2016definition	« The project is implemented in a way that respects fundamental rights ».		
Additional definition	Projects in the Region are carried out in compliance with fundamental rights and existing legislation. Each project can participate in improving practices with regard to one or many fundamental rights in respect of the objectives of generalized interests set by the law or the following texts:  - Universal Declaration of Human Rights (1948),  - Covenant on Civil and Political Rights (1969),  - Covenant on Economic, Social and Cultural Rights (1969),  - The fundamental rights at work as identified by the International Labour Organization.		
Possible illustrations	<ul> <li>Security and health of persons, workers on construction sites.</li> <li>Right to come and go.</li> <li>Right to education.</li> <li>Equal rights and opportunities.</li> </ul>		

Responsible regional development			
Vigeo 2016 definition	« The project increases the Region's attractiveness in keeping with sustainable and balanced economic development ».		
Additional definition	The project participates in the development of dynamization of the region from a long-term perspective, responding to a need, or anticipating the creation of new needs, or accompanying the urban development of a sector.		
Possible illustrations	<ul> <li>Needs in terms of transportation, employment, the supply of tourism, green spaces, etc.</li> <li>Integration into a development zone.</li> <li>Innovative projects participating in the dynamization of the territory.</li> <li>Projects directly supporting economic activity in disadvantaged areas.</li> </ul>		

Regional economic development			
Vigeo 2016 definition	« The project contributes to creating or maintaining jobs and/or sustainable business activities in the Region ».		
Additional definition	The project may sustain employment, on a construction site and in operational phase, or accompanying SME projects with growth prospects, or by supporting innovative processes and research, a source of dynamism and potential long-term job prospects, or also by maintaining an economic activity in certain areas.		
Possible illustrations	Creation / support to FTEs.		

Fair practices, responsible purchasing and responsible supplier relations				
Vigeo 2016 definition	"The project is implemented in compliance with fair practice principles (combating corruption, fair competition, respect for labour laws, and equal treatment, etc.). Environmental and social factors are included in the purchase of products and services relating to the project. The purchasing practices relating to the project enable the interests of suppliers and sub-contractors to be respected (payment terms, managing dependency, and equality of access to orders, etc.)".			
Additional definition	The different service providers acting on the project have been selected in the framework of a transparent procedure, in respect of the principle of equal treatment and of competition. Environmental and/or social requirements are provided for in the specifications and regulations of the subsidy.			
Possible illustrations	<ul> <li>Application of the Public Procurement Code, transparency of the investigation process in the context of subsidies.</li> <li>Elements of the "Responsible public procurement" of the Region applicable to the project.</li> <li>Choice of materials which are respectful of the environment, hours of social integration.</li> </ul>			

Consultation with stakeholders			
Vigeo 2016 definition	"The project is subject to an appropriate consultation process, both internally and/or with the external stakeholders concerned (information meetings, steering committee, meetings with voluntary organisations, and representation of elected officials, etc.), whose expressed requirements are taken into account ».		
Additional definition	The project was implemented in a context of consultation aiming to account for the needs of stakeholders without distorting the object of the project.		
Possible illustrations	<ul> <li>Dialogue and consultation with the stakeholders</li> <li>Description of public surveys</li> <li>Description of the consultation of the process of evaluating subsidies and/or financial sheets on the project</li> </ul>		

#### **ADEME**

French Environment and Energy Management Agency (Agence de l'environnement et de la maîtrise de l'énergie).

#### ANRU

National Agency for Urban Renewal.

#### BEPOS BUILDING (CALLED "POSITIVE ENERGY")

building that has very low energy consumption. Its primary energy consumption must be less than the amount of renewable energy it produces via its equipment.

#### **BIOCLIMATIC DESIGN**

architecture for the project adapted as a function of characteristics and specificities of the area where the project takes place, in order to draw benefits and advantages and to protect against disadvantages and constraints. The main objective is to obtain the comfort of the desired ambiance as naturally as possible by using architectural means, the available renewable energies and using as little as possible mechanical technical means and external energy on the site.

#### **CERTIFICATION BEPOS EFFINERGIE 2013**

A pilot certification that can be awarded in the short term; it builds on the 2012 thermal regulations and the Effinergie+ certification. Above all, the building must respect the criteria of the Effinergie+ certification and must also be the subject of an evaluation of the grey energy and the potential of eco-mobility.

#### **CERTIFICATIONS FSC AND PEFC**

These certifications are defining forest sustainable management rules, in compliance with international standards. They are based on the FSC (Forest Stewardship Council) or PEFC (Pan European Forest Certification) references

## CERTIFICATION NF HIGH ENVIRONMENTAL QUALITY (HQE) TERTIARY BUILDINGS

Enables to discern between buildings where the environmental and energy performance corresponds with best existing practices. It concerns the phases of the programming, the conception and delivery for new and renovated housing units.

#### **CERTIFICATION PATRIMOINE HABITAT**

values a rehabilitation program committed to by a contracting authority by setting the level of performance to achieve. It accounts for the quality of the budget and the community parties, the comfort and performance of housing, fire safety and health of occupants.

#### **COMPETITIVENESS CLUSTERS**

Created in 2005 in the framework of the launch of a new industrial policy in France, the competitiveness clusters are defined as the combination in the same territory of businesses, higher education establishments, and public or private research organizations which have the vocation to work in synergy to implement economic development projects for innovation. Competitiveness clusters promote the development of relationships between businesses/research laboratories, or SMEs/Large groups in Île-de-France but also internationally with partner clusters and with the knowledge of their ecosystem to assist a business, a laboratory to identify the skills/know-how needed to complete their project. They accompany the businesses, and primarily SMEs to improve their project by calling upon a network of experts among their members.

#### DOGGER

It is the major geothermal groundwater exploited in Île-de-France. The aquifer lies between 1,500 m and 2,000 m depth, and offers a temperature between 65°C and 85°C.

#### DUP

Statement of public interest (Déclaration d'Utilité Publique).

## ECO-ACTIVITIES RELATED TO ECONOMIC DEVELOPMENT POLICIES

Projects relating to the sector of eco-activities when they address an energy challenge or deal with the measurement, prevention or reparation of environmental pollution.

#### **ECO-MOBILITY POTENTIAL (FOR A BUILDING OR DWELLING)**

Corresponds to the energy consumption generated by the journeys of the users of that building or dwelling. When assessing the energy performance of a building or a dwelling, these consumptions are also taken into account.

#### **GREY ENERGY**

Corresponds to the total consumed energy expenditure throughout the life cycle of a material, its extraction and recycling, and including its transformation.

#### "LABEL EFFINERGIE +"

label targeting 20% decrease in maximum energy usage linked to five regulation-related building uses (heating, hot water, lighting...) compared to the level in the 2012 french thermal regulation (RT 2012); this label aims to go further than the BBC label in terms of the construction of new buildings. It plan to go from 50 to 40 kWhep/m²/year for housing with an intermediate level of 45 kWhep/m²/year until 2014. "Effinergie" + also requires a Bbio (bioclimatic needs)) 20% lower than the BBio set by the 2012 RT The requirement in terms of air permeability are also higher than the BBC label.

#### "LABEL BBC EFFINERGIE" FOR RENOVATION

this label concerns renovated residential buildings, with an objective of a maximum primary fixed energy consumption of 80 kWh/m².year, adjusted for the climatic zone and altitude. In  $\hat{l}$ le-de-France, a coefficient of 1.3 must be applied to this objective.

#### **MODAL SHIFT**

Allows users to benefit from an alternative to a car by choosing a mode of collective transportation which is more environmentally-friendly.

#### PRU

Urban Renovation Project (Projet de Rénovation Urbaine).

#### STATE-REGION CONTRACT PLAN (CONTRAT DE PLAN ETAT-RÉGION - CPER)

Document of contractualization between the State and Region establishing a list of project to be carried out over several years.

#### **RT 2020**

New Thermal Regulation that will become effective in France from 2020. It will replace current regulation (RT 2012). One of its goals will be that, by 2020, all new building constructions will produce as much energy as its consumption.

#### **SDRIF**

Master Plan for Urban planning of Île-de-France (Schéma Directeur Régional d'Île-de-France).

#### SIPPEREC

Intercommunal organisation of Paris' periphery for energy and communication networks (Syndicat Intercommunal de la Périphérie de Paris pour les Energies et les Réseaux de Communication).

#### **TCSP**

public transport on own site.

#### ZAC

Concerted development zone.

This document falls	within the con	text of the iss	suance of th	he green and	l sustainability k	oond
carried out by the F	Réaion Île-de-F	rance in 2018	and is in p	articular inte	nded for invest	ors.

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