REGION ILE-DE-FRANCE

PROJECTS FINANCED BY THE 2017 GREEN AND SUSTAINABILITY BOND



>>

EDITO



Valérie Pécresse, President of the Ile-de-France Region transport conditions for 4.4 million users. In March 2017, the Ile-de-France Region launched for the seventh time a green and sustainability bond issue. This issue demonstrates the long-term commitment of the local authority that I chair to fund structural projects that promote sustainable development. Half of the region's outstanding debt is now of green and sustainability origin.

This situation also illustrates the excellent positioning of the Paris financial centre in green finance and the ability of its players to innovate, with the aim of promoting responsible development.

This reporting is exemplary in its ability to report on investment projects that the Region supports. In keeping with our commitment, it covers the emblematic projects funded over the last twelve months. This document highlights the dynamic impetus given by the Regional Council to promote the attractiveness of Ile-de-France and ensure a balanced development of the entire area. The new electrification project for the Paris-Troyes railway line, which was launched following the signing in 2016 of the financing agreement, is emblematic of this approach and an example in terms of polluting emissions reduction. It will electrify more than 130 kilometres of track, leading to the storage of train diesel engines, and improve the

Other projects are also presented that fall within the scope of the key competences of the Region, such as the construction or renovation of high schools, to the highest standards, or the development of the Condorcet campus, a major research centre in the social and humanities sciences in Aubervilliers. This is designed to accommodate eight research centres, more than 900 researchers, a large library (Grand Espace Documentaire), and advanced scientific equipment at the forefront, all located on the campus.

The development of this reporting is also part of our commitment to develop our practices and those of our partners, in order to spread a culture of transparency in public action and assessment, which is a strong expectation of the citizens.

The operations presented are also part of the Sustainable Development Goals (SDGs) put in place in 2015 by the United Nations. Defined at the State level, the SDGs call for an active commitment by all players. They are intended to serve as the main basis for monitoring progress in all countries on a common scale at the international level.

The IIe-de-France Region approach is consistent with the development of SDGs by its actions and policies. I would like to emphasize that this reporting represents a remarkable collective work, which reflects a more open and innovative administration, as evidenced by its relocation into a new headquarters in Saint-Ouen. This move allows, in addition to improved service efficiency, rebalancing the area to make Greater Paris a reality.

I hope that this new edition of the report will still arouse the interest of the investors who have placed their confidence in us, and that it will make them want to continue being part of the investment projects of the future of Ile-de-France.

SUMMARY



Projects financed by the 2017 green and sustainability bond 3

2017 Green and sustainability bond



Projects financed by the green and sustainability bond 2017

	Amount	Allocation rate	
	500	100 %	
BUILDINGS AND FACILITIES FOR EDUCATION AND LEISURE	103.0	20.6 %	p.17
Projects: construction of new high schools Boulogne-Billancourt high school Lucie Aubrac high school - Courbevoie Projects: renovation of high schools	40.9 17.8 23.1 20.7	8.2 %	p.18 p.20
Alexandre Denis high school - Cerny Léonard de Vinci high school - Saint-Germain-en-Laye Projetcts: construction for higher education Maison des Sciences de l'Environnement - Université Paris Est Créteil	6.3 14.4 8.8 1.9	1.8 %	p.22 p.24 p.26
Maison de l'Ile de France - Cité Internationale Universitaire de Paris Ecole des Hautes Etudes en Sciences Sociales - Campus Condorcet Grand Espace Documentaire (library) - Campus Condorcet	2.3 1.3 3.3	4 5 9/	p.28 p.30 p.32
Leisure and sport centre - Vaires-Torcy	32.6	0.5 %	p.34
PUBLIC TRANSPORT AND SUSTAINABLE TRANSPORTATION	240.6	48.1 %	p.37
Projects: subways Subway line 4 Subway line 11 Subway line 14 Projects: tramways Tramway line 14	160.8 53.0 77.7 30.1 37.8	32.2 % 7.6 %	p.38 p.40 p.42
Tramway line T9 Tramway line T11 (north tangential) Tramway line T12 Projects: railway links	1.9 15.3 11.3 13.8	2.7 %	p.46 p.48 p.50
Ligne P (Paris-Troyes) Scheme: development for buses on own sites and layout of roadways Example: Bus on own site of Massy-Saclay Scheme: master plan for accessibility	12.8 1.0 18.2 0.3 10.0	3.6 %	p.52 p.54 p.56
Example: Railway station of Saint-Denis	1.8		p.58
RENEWABLE ENERGY AND ENERGY-EFFICIENCY	13.4	2.7 %	p.61
Scheme: energy policy and transversal actions Example: Geothermal energy at Grigny-Viry Châtilon	13.4 1.4	2.7 %	p.62
BIODIVERSITY	21.6	4.3 %	p.65
Scheme: acquisition and development by the Green Spaces Agency Example: Butte Pinson Scheme: protection of biodiversity, water policy and transversal actions	10.5 0.4 11.1	2.1 % 2.2 %	p.66
Example: Marne riverbank at Noisy-Le-Grand	0.4	1.0.%	p.68
Social Initiatives Almed AT HELPING VOLNERABLE POPULATION GROUPS Scheme: support for social actions Example: Le parc de l'Abbaye - Medico-Educational Institute at Saint-Maur	9.0 9.0 0.3	1.8 %	p.71
SOCIAL HOUSING	68.8	13.8 %	p.75
Scheme: support for social houcing Example: Social and student residence at Bry-sur-Marne Example: Social housing at Carrieres-sous-Poissy	68.8 1.4 0.3	13.8 %	p.76 p.78
ECONOMIC AND SOCIALLY INCLUSIVE DEVELOPMENT	43.6	8.7 %	p.81
Schemes: support for research and innovation Example: Support to the regional competitiveness clusters Example : Support to scientific investment (Domaines d'Intérêt Majeur et Sesame) Schemes: support for social and solidary economics Example: Support to micro-credit activities	41.8 18.6 23.2 1.8 0.7	8.3%	p.82 p.84 p.86

This document falls within the context of the issuance of the green and sustainability bond carried out by the IIe-de-France Region in 2017 and is in particular intended for investors.

Any reproduction of this document for public purposes, in whole or in part, is prohibited without the express written authorization of the IIe-de-France Region.

PRESENTATION OF REGION ILE-DE-FRANCE

As a leading French local authority, the Ile-de-France Region manages a budget of € 5 billion, the highest amongst French regions. Almost 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 guidelines of local public actions on the territory: territorial development, transports using IIe-de-France Mobilités (new name of STIF, Syndicat des Transports en IIe-de-France), economic development, research and innovation, climate and energy, biodiversity, waste management.

The Region is also 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, with for example the implementation in 2016 of new responsible purchasing policy.

In this context, environment is at the heart of regional policies, with an ambitious and holistic roadmap focused on territories which nourishes all regional policies :

- Transports: Environmental objective to reduce GHG emissions related to transport and mobility,
- New regional strategy for economic development, innovation and internalisation: The new strategy includes the environmental issues in order to meet a dual objective of identifying potential economic activities, employment and innovation as well as improving the wellbeing of the population from the Region,
- Continuing territorialisation of the regional environmental policy to inject new environmental dynamics to be introduced as part of projects for the development of IIe-de-France communities. The new "One Hundred Innovative and Ecological Neighbourhoods" scheme, launched in 2016, illustrates this development,
- Repositioning of the support to key research networks (Domaine d'Intérêt Majeur), targeting the main environment challenges: climate, energy and resources
- High environmental requirements, with the adoption of various plans over the last two years, such as the "Change of air" plans since 2016, but also the "Green" and "Bike" plans in 2017, or the implementation in 2018 of a new Energy and Climate Strategy that will focus on innovation and the development of renewable energies,
- Support organic farming and direct producer-to-consumer business in Region Ile-de-France
- As of 2017, inclusion of an environmental bonus in social housing subsidies for the most efficient programs (eco-materials, Positive energy building 'BEPOS').

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 and AA with a stable outlook by Moody's and Fitch. Extra-financial performances of the IIe-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 2017 as "advanced", with an overall rating of 62/100. The Region is classified as being at an "advanced" stage as a whole.

A REGULAR ISSUER ON THE GREEN BOND MARKET

The IIe-de-France Region is a frequent and regular issuer in the green bond market. It has raised € 2.7 billion through the green and sustainability bonds issued between 2012 and 2017, through seven transactions including five new public benchmarks. This amount represents 69% 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 Sustainability 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 2015 reporting, or through the use of an updated second opinion on Region's commitments in 2016. The green and sustainability framework established by Region IIe-de-France is described hereafter.

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



Recent awards :

- The Climate Bond Initiative organization has assigned to the Region the prize for "First Municipal Green Bond" on the occasion of the Green Bond Awards 2016, which recognizes the overall strategy pursued by the Region in terms of green and sustainability bonds.
- GlobalCapital has assigned to the Region two awards in September 2016: "Most Impressive Municipal/Local Authority Green/SRI Bond Issuer" and "Public Sector Green Bond Deal of the Year".

GREEN AND SUSTAINABILITY BOND FRAMEWORK OF REGION ILE-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.

1/ 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 sustain- able development approach that contributes to protecting the environ- ment, 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, accessibil- ity 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 popu- lation 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 ac- cess 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.

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

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



9. Consultation with stakeholders

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

Reporting published by Region Ile-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.

4/ Transparency on management of proceeds and on the process of allocation and selection

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.

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 porfolio,
- 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 2017 REPORTING

The following reporting presented this year on projects financed by the 2017 green and sustainability bond includes the same level of information as last year's reporting, with:

- 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,
- 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 informations 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 to the previous green and sustainability bonds issued by the Region is presented.
- A methodology notice presenting each methodology used to calculate the impact indicators for each project presented in this reporting.

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 2017 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 methodology notice. This approach shows that, on average, each project contributes positively and directly to 8.5 UN Sustainable Development Goals compared to a subset of thirteen Sustainable Development Goals that can potentially be applied directly to investment projects financed by the 2017 green and sustainability bond.

P	Process regarding 2017 reporting
Mid- november 2017	Launch of the allocation and project selection process
December / January 2018	Consultation with the relevant departments to identify a set of eligible projects
January 2018	First projected project selection by the Finance department
January- February	Verification of the amount of expense of each project by the Management Control and Information Systems department
January- February	Each relevant department 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.
January- February	Consolidation, harmonisation and consistency checks are carried out by the finance department on all the information generated
end- frebruary /march	Formatting of the report
March 7 2018	Publication of the report

29

Projects and examples of schemes presented and financed by the 2017 green and sustainability bond

56 %

Rollover rate of projects and schemes compared to last year reporting

11

New projects and examples of schemes having benefited from 2017 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 2017 green and sustainability bond

	Purpose of the project
BUILDINGS AND FACILITIES FOR EDUCATION AND LEISURE	
Projects: construction of new high schools	
Lycée Boulogne-Billancourt	Construction of a new high school
Lycée Lucie Aubrac – Courbevoie NEW PROJECT	Construction of a new high school
Projects: renovation of high schools	
Lycée Alexandre Denis - Cerny NEW PROJECT	Restructuring and expansion of the high school
Lycée Léonard de Vinci - Saint-Germain-en-Laye	Reconstruction on the site
Projects: construction for higher education	
Maison des Sciences de l'Environnement – Université Paris Est Créteil	New construction
Maison de l'Ile de France - Cité Internationale Universitaire de Paris	New construction
Ecole des Hautes Etudes en Sciences Sociales - Campus Condorcet	New construction
Grand Espace Documentaire – Campus Condorcet	
Project: construction of a sports complex of regional interest	New construction, reportion and development of the site
lle de loisirs et sportive de Vaires-Iorcy	new construction, renovation 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	
Tramway line T4	New branch between Bondy and Montfermeil
Tramway line 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	New line between Massy-Palaiseau and Evry Courcouronnes
Projects: railway links	
EOLE	West extension of the RER E
Ligne P (Paris-Troyes)	Electrification of the railway line between Paris and Troyes
Scheme: development for buses on own sites and layout of roadways	
Example: Bus on own site of Massy-Saclay	New line between Massy-Saclay and Saint-Quentin-en-Yvelines
Scheme: master plan for accessibility	
Example: Railway station of Saint-Denis	Accessibility of the train station
RENEWABLE ENERGY AND ENERGY-EFFICIENCY	
Scheme: energy policy and transversal actions	
Example: Geothermal energy at Grigny-Viry Châtillon	Creation of the heating network and connection to the network
BIODIVERSITY	
Scheme: acquisition and development by the Green Spaces Agency	
Example : Butte de Pinson New Project	Restoration work of the southern park of the Butte Pinson
Scheme: protection of biodiversity, water policy and transversal actions	Development of 1,200 meters of banks of the left bank of the Marrow
	Development of 1,280 meters of banks of the left bank of the Marne
SOCIAL INITIATIVES AIMED AT HELPING VULNERABLE POPULATION GROUPS	
Scheme: support for social actions	
Example: Le parc de l'Abbaye - Medico-Educational Institute at Saint-Maur	Rehabilitation works of the institute
SOCIAL HOUSING	
Scheme: support for social housing	
Example: Social and student residence at Bry-sur-Marne	Construction of 61 new housing units and 144 new student units
Example: Social housing at Carrieres-sous-Poissy	Construction of 50 new social housing units
Schemes: support for research and innovation	
Example: Support to the regional competitiveness clusters	Promoting the emergence of research and development projects
Example : Support to scientific investment	Support strategic investments on innovative research projects
(Domaines d'Intérêt Maieur et Sesame)	
Schemes: support for social and solidary economics	
Example: Support to micro-credit activities	Special loans and regional premiums coupled to the ADIE micro-credi

* Sum of work site FTEs and operations FTEs, included integration FTEs if applicable

Impacts of the projects presented					Footprint of the	e bond (impacts we bonds	eighted by the am allocated to the p	ount of green and roject	sustainability
	Total project cost (1)	CO ₂ avoided (teq/year) by the project	FTEs supported by the project*	Number of beneficiaries of the project	Allocated amount (2)	Weight (2) / (1)	CO ₂ avoided (teq/year)	FTEs supported	Perimeter covered by impact indicators
	39.0 53.6	84 38	10 11	800 1,500	17.8 23.1	45.6 % 43.1 %	38.3 16.4	4.6 4.7	100 % 100 %
	41.8 48.9	117 41	10 16	1,179 600	6.3 14.4	15.1 % 29.4 %	17.7 12.1	1.5 4.7	100 % 100 %
	15.0 21.6	13	49 75	379 1,442	1.9 2.3	12.7 % 10.6 %	1.4	6.2 8.0	100 % 100 %
	38.8 102.3	24 285	101 245	16,966 30,950	1.3 3.3	3.4 % 3.2 %	0.8 9.1	3.4 7.8	100 % 100 %
	90.0		133	564,000	32.6	36.2 %		48.1	100 %
	307.1	570	2,180	755,800	53	17.3 %	98.6	377.1	100 %
	1,380.0	3,255 7,310	9,216 9,798	176,000	30.1	8.0 % 2.2 %	195.3 160.8	215.6	100 %
	255.8 403.3	1,338	1,816 2,863 4 337	62,000 70,000	9.3 1.9 15 3	3.6 % 0.5 % 2.5 %	6.7 5175	65.4 14.3	100 % 100 %
	576.7	2,534	4,095	40,000	11.3	2.0 %	50.7	81.9	100 %
	3,740.9 320.0	8,040 50,000	26,554 2,272	1,400,000 4,400,000	12.8 1.0	0.3 % 0.3 %	24.1 150.0	79.7 6.8	100 % 100 %
	58.0		412	10,000	0.3	0.5 %		2.1	2 %
	58.2		413	90,000	1.8	3.1 %		12.8	18 %
	15.1	15,000	106	27,028	1.4	9.3 %	1,395.0	9.9	10 %
	1.0			120,000	0.4	40.0 %			4 %
	1.3			62,900	0.4	30.8 %			4 %
	7.1	243	77	53	0.3	0.7.%	27.6	71	7.9/
	5.1	243	75		0.5	7.7 70	23.0	7.1	5 78
	14.0 9.2		104 58	216 117	1.4 0.3	10.0 % 3.3 %		10.4 1. 9	2 % > 1 %
	18.6			39	18.6	100.0 %			100 %
	23.2			1 949	23.2	100.0 %			100 %
	0.7			1,048	0.7	100.0 %			J7 70

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

	1 PARTY	2 mm	3 EDGE HEALTH	4 EDUCATION	5 EQUALITY	6 AND LANGENING
	Å ₽₩₩				ę	Å
Boulogne-Billancourt high school	•			۲		•
Lucie Aubrac high school	•			۲		•
Alexandre Denis high school	•			۲		•
Léonard de Vinci high school	•			۲		•
Maison des Sciences de l'Environnement	•			۲		
Maison de l'Île-de-France	•			۲		•
École des Hautes Études en Sciences Sociales	•			۲		
Grand Espace Documentaire (library) - Campus Condorcet	•			۲		
Leisure and sport centre	•			۲		•
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)	•					
Bus on own site of Massy-Saclay	•					
Railway station of Saint-Denis	•					
Geothermal energy at Grigny-Viry Châtillon	•					•
Butte de Pinson	•					•
Development work of the Marne riverbank	•					•
Le parc de l'Abbaye – Medico-Educational Institute	•		۲	۲		
Social and student residence at Bry-sur-Marne	•					•
Social housing at Carrieres-sous-Poissy	•					
Support to the regional competitiveness clusters	•		•			•
Support to scientific investment (DIM & Sesame)	•		•			•
Support to micro-credit activities	•					

Reading

i.

1

Goals 2, 5, 16, 17 (shaded columns) relate more directly to the social responsibility of the Region, than the investment projects financed by the 2017 green and sustainability bond.

Goals 1, 8, 10, 11, 12, 13 (green columns) are in line with the eligibility criteria established by the Region and therefore each project contributes positively (with the exception of micro-credit support Goals 12 and 13).

With regard to the contributions to Goal 3, they are assessed solely from the point of view of public health, as defined by the United Nations, and are therefore not based on the qualitative elements of well-being that have been presented in the project sheets.

The contribution of the projects to the other goals is examined on a case-by-case basis, according to the specific features of each project as shown in the sheets of this report.

For each project, the main SDG is identified by a double-circle. See also the methodological note in appendix 1.

.

.

7 manufacture	8 DECENT WORK AND ECONOMIC GROWTH		10 REDUCED INEQUALITIES		12 USE CONCERNING AND THE ADDRESS OF	13 CLIMATE	14 intervention		16 MARE ANTINE	17 PARTNERSHIPS FOR THE GOALS
- :	11			AB	00			—	Z	88
•	•		•	•	•	•				
•	•		•	•	•	•				
•	•		•	•	•	•				
•	•		•	•	•	•				
٠	•		•	•	•	•		•		
•	•		•	•	•	•		•		
•	•		•	•	•	•				
•	•		•	•	•	•				
•	•		•	•	•	•	•	•		
•	•	•	•	۲	•	•				
•	•	•	•	۲	•	•				
•	•	•	•	۲	•	•				
•	•	•	•	۲	•	•		•		
•	•	•	•	۲	•	•				
٠	•	•	•	۲	•	•				
•	•	•	•	۲	•	•				
•	•	•	•	۲	•	•				
•	•	•	•	۲	•	•				
•	•	•	•	۲	•	•	•	•		
•	•	•	•	۲	•	•				
۲	•		•	•	•	•				
	•		•	•	•	•	۲	Θ		
	•		•	•	•	•	۲	0		
•	•		•	•	•	•				
•	•		0	•	•	•				
•	•		\odot	•	•	•				
•	۲	•	•	•	•	•				
•	۲	•	•	•	•	•				
	\odot		•	•						



BUILDINGS AND FACILITIES FOR EDUCATION AND LEISURE



Construction and renovation of buildings according to a sustainable development approach, contributing to respect for the environment and accessibility to persons with reduced mobility.

The Region has adopted a new programme of investment for high schools, in consultation with the local education authorities and communities in the IIe-de-France region. 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 IIe-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 educaton.

• 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

Purpose			Construction of a new	high schools	
Locations			Boulogne-Billancourt		
Key dates			Competitive tender for project management: 2015; Worksite in progress; Opening at start of school year in 2018		
Total project cost			€ 39.0 million		
Financing by the Region in the total am	ount of the project		100.0%		
2017 financing by the green and sustai	nability bond		€ 17.8 million		
Timeline of project financing by pr⊾	2014	2015	2016	2017	
		€ 2.5 M	€ 10.7 M	€ 17.8 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 IIe-de-France high schools and as such exercises an essential responsibility for IIe-de-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)oftheTrapèze:Eco-neighbourhoodontheemblematicsiteof former Renault factories, linking up between the Seine and the urban core.

▶ PROJECT LIFECYCLE

- After a notification of works in December 2016, the construction started at the beginning of 2017 with a general contractor, in order to ensure the tight completion times.
- This year, it was possible to carry out the earthworks, as well as the structural work that will be completed in January 2018. The historic entrance pediment of the Renault plants has beenrestored and enhanced.
- The commissioning is scheduled for the autumn of 2018, for reception of the pupils for the next school year.

► IMPACT INDICATORS FOR THE PROJECT

Indicator	Impact	Methodological note
Integration FTEs supported by the project	10 FTEs	В
Number of beneficiaries of the project	800	D-1
CO ₂ avoided by the project	84 CO ₂ teq/year	E-1



► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and ecodesign	 HQE® certification approach. Specifications defining the environmental requirements for investment in the high schools. "Worksite with minimal environmental disturbances" charter with all waste traceability objectives and a minimum recovery requirement of 70%. Environmental monitoring of each phase by a specialist contracting authority assistant.
Combating climate change, and promoting the Region's environmental transition	 "Zero Energy" target: energy production on site will provide the equivalent of the needs related to regulatory uses not covered by renewable energy. Installation of photovoltaic panels on the roof. Alternative rainwater management with green roofing, a rainwater collection, and discharge towards the urban valley of the ZAC (development zone).
Sustainable regional planning and improving quality of life	 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. Reinforcement period envisaged in the works contract with maintenance without any phytosanitary product in order to avoid any pollution of the runoff water. Compact building on the plot, favourable to the building inertia and its place in a built-up environment. 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
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	 Provision of general and technological education. International section and preparatory class for the Grandes Écoles. Reduction of the post-baccalaureate territorial imbalances.
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	 Application of the Public Procurement Code by the project officer. Requirements on the choice of construction products (to save on natural resources).
Consultation with stakeholders	 Information and consultation procedure extended to the entire school community. Public meetings during the major phases of the operation.

LUCIE AUBRAC HIGH SCHOOL

Projects: construction of new high schools

NEW PROJECT

Purpose	Construction of a new high schools
Locations	Courbevoie
Key dates	Competitive tender for project management: 2014; Surveys : 2015; Public tender for worksite : 2016 ; Worksite in progress; Opening at start of school year in 2018
Total project cost	€ 53.6 million
Financing by the Region in the total amount of the project	100.0%
2017 financing by the green and sustainability bond	€ 23.1 million

► OUALITATIVE 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 lle-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

• After preparation of the ground in the autumn of 2016, construction began in January 2017 with a general contractor to achieve the timetable constraints.

13 122

- All earthworks and structural work are done. The closed roof is being completed with a large central photovoltaic glass atrium.
- Opening is scheduled for September 2018, to ensure the reception of pupils for the new school year.

► IMPACT INDICATORS FOR THE PROJECT

Indicator	Impact	Methodological note
Integration FTEs supported by the project	11 FTEs	В
Number of beneficiaries of the project	1,500	D-1
CO ₂ avoided by the project	38 CO ₂ teq/year	E-1



► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and ecodesign	 HQE® certification approach. Specifications defining the environmental requirements for investment in the high schools. "Worksite with minimal environmental disturbances" charter with all waste traceability objectives and a minimum recovery requirement of 70%. Environmental monitoring of each phase by a specialist contracting authority assistant.
Combating climate change, and promoting the Region's environmental transition	 "Zero Energy" target: energy production on site will provide the equivalent of the needs related to regulatory uses not covered by renewable energy. 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. Production of domestic hot water of the housing by installation of thermal solar panels on the roof. High efficiency gas boiler completed with cogeneration to allow additional on-site electricity production. 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. 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. Plant diversity, with non-allergenic species requiring liale maintenance and water: reinforcement period specified in the works contract without use of any phytosanitaryproduct.
Sustainable regional planning and improving quality of life	 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. 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. 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.
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	 Courses that provide a diversified and quality training offering in the region. International section and preparatory class for the Grandes Ecoles. In addition to general education units, it is planned to host a technological STMG (Science and Technology Management and Management) course, as well as an international section, with a post-GCSE level preparatory class for the Grandes Écoles.
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	 Application of the Public Procurement Code by the project officer. Requirements on the choice of construction products (to save on natural resources).
Consultation with stakeholders	 Information and consultation procedure extended to the entire school community. Public meetings during the major phases of the operation.

ALEXANDRE DENIS HIGH SCHOOL

Projects: renovation of high schools

/	//////	77/////		
	/ 15m	4 112.	6 Maile / 7 1	8 1000
	tittit.	/ 🚺 /	(, 🔽 () 🕴	🔅 / 🎢

Purpose	Restructuring and expansion of the High School
Locations	Cerny
Key dates	Competitive tender for project management: 2014; Surveys : 2015-2016; Public tender for worksite : 2017; Worksite in progress
Total project cost	€ 41.8 million
Financing by the Region in the total amount of the project	100,0%
	0 / T 111

2017 financing by the green and sustainability bond

€ 6.3 million

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- Establishment located in a small rural Essonne town, on a large 7 ha 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 pro duction of wood located in the Gâtinais Regional Park.

▶ PROJECT LIFECYCLE

- The public tender for works took place in 2017.
- The site facilities were put in place at the end of 2017, followed by earthworks and demolition work. Housing foundations begin in the first quarter of 2018.

10 11

13 🗐

• The commissioning of a first phase is scheduled for 2019, the final delivery being scheduled for October 2020.

► IMPACT INDICATORS FOR THE PROJECT

Indicator	Impact	Methodological note
Integration FTEs supported by the project	10 FTEs	В
Number of beneficiaries of the project	1,179	D-1
CO ₂ avoided by the project	117 CO ₂ teq/year	E-1



▶ JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

6

Environmental management and ecodesign	 Specifications defining the environmental requirements for investment in the high schools. "Worksite with minimal environmental disturbances" charter with all waste traceabilityobjectives and a minimum recovery requirement of 70%. Environmental monitoring of each phase by a specialist contracting authority assistant.
Combating climate change, and promoting the Region's environmental transition	 Production of domestic hot water for the houses by installation of solar thermal panels on the roof (supplemented by the gas boiler). Low consumption goal. 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. Creation of a wood boiler for the benefit of the entire site, including for existing high school buildings that were not rebuilt. Recommending a short circuit biomass supply by local industry, in coordination with the Gâtinais Regional Park, which supports this platform. Alternative water management with a goal of zero discharge of rainwater to the mains, thus maximum delivery and retention on site. Parking in honeycombed slabs with grass and gravel filling to limit water proofing.
Sustainable regional planning and improving quality of life	 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. Take into account the different levels on the site. Use of the earth as insulation, especially at the north ground level next to the gym.
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	 Streams contributing to provide diversified and quality training in the region High school focused on professional courses, with a strong specialisation in the aeronautics trades, in connection with the nearby La Ferté-Alais airfield. 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. Availability of an internship on the site ensures wide geographical recruitment of students.
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	 Application of the Public Procurement Code by the project officer. Requirements on the choice of construction products (to save on natural resources).
Consultation with stakeholders	 Information and consultation procedure extended to the entire school community. Public meetings during the major phases of the operation.

LÉONARD DE VINCI HIGH SCHOOL

Projects: renovation of high schools

1 Sen	4 225.	6 1111	1	8 1000 0000	10	11 12 22 10 10	12	13 🚟
tittit /	/ 🚺 /	Q	/ 🔅 /	î î	÷		∞	O

Purpose			Reconstruction on	the site			
Locations			Saint-Germain-en	-Laye			
Key dates			Competitive tende Delivery by tranche	r for project manage es of 2015 to 2017.	ment: 201	12; Worksite in prog	gress;
Total project cost			€ 48.9 million				
Financing by the Region in the to	otal amount of the project		100.0%				
2017 financing by the green and	sustainability bond		€ 14.4 million				
Timeline of project financing by	previous areen and sustainabili	tv bonds					
	2014	2015	2016	2017			
	€ 12 M	€ 4.7 M	€ 2.4 M	€ 14.4 M			

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- Demolition and reconstruction of the facility on its plot.
- A key competence of the Region, which manages the lle-de-France high schools and as such exercises an essential responsibility for lle-de-France youth and their families.
- HQE® certification process and a goal of BBC energy label, with conection to a heating network promoting renewable energy.
- Compact design for frame around a landscaped patio, facilitating the operation's onsite phasing to maintain the high school activity during construction.

► PROJECT LIFECYCLE

- This year was dedicated to the work of the second part, which holds the professional workshops and general education rooms.
- All earthworks and most of the structural work are done. The roof and cover of the whole are scheduled for spring 2018.
- Delivery is scheduled for the 1st quarter of 2019, with the final removal of temporary facilities.

▶ IMPACT INDICATORS FOR THE PROJECT

Indicator	Impact	Methodological note
Integration FTEs supported by the project	16 FTEs	В
Number of beneficiaries of the project	600	D-1
CO ₂ avoided by the project	41 CO ₂ teq/year	E-1



▶ JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

 HQE® certification approach. Specifications defining the environmental requirements for investment in the high schools. "Worksite with minimal environmental disturbances" charter with all waste traceability objectives and a minimum recovery requirement of 70%. Environmental monitoring of each phase by a specialist contracting authority assistant. Phasing of work in several tranches to ensure the continuity of the institution's activities conducted during construction on an occupied site.
 Low energy consumption target for the regulatory thermal calculations of the 5 contractual uses of the thermal regulations (theoretical calculation during design and verification phase at the end of construction). Feed for heating and hot water from the local heating network primarily supplied by biomass. Recovery of rainwater, drainage trenches and roadway reservoir providing alternative storm water management and good permeability for the land parcel.
 Green roofs. Compact design of frame around a landscaped patio. Contributes to improving the quality of life, with modernization of the workshops and halfboard, and to overcoming the current lack of space for relaxation and school life
Access for disabled people.
Combating social, educational and regional inequalities.
 Provision of diversified quality training in the territory (professional and technological sectors): CAP (preparation and construction of electrical works), BAC (Life and Earth Sciences (SVT)), Technology Bac (Technological Innovation and Eco-Design (STI2D), energy and environment (STI2D)), Bac Pro (Electrical Energy Communicating Equipment (ELEEC), maintenance of industrial equipment), BTS (Electrical Engineering, Design and Implementation of Automatic System), Reducing the post-baccalaureate territorial imbalances.
 Supporting employment during construction, supporting integration employment and recruiting welcoming, maintenance, catering and accommodation staff within the school.
 Application of the Public Procurement Code by the project officer. Requirements on the choice of construction products (to save on natural resources).
 Information and consultation procedure extended to the entire school community. Public meetings during the major phases of the operation.

MAISON DES SCIENCES DE L'ENVIRONNEMENT

Projects: construction for higher education

Purpose		1	lew construction			
Locations		L	niversité Paris Est Cı	réteil		
Key dates		D	elivery in august 201	17		
Total project cost		0	15.0 million			
Financing by the Region in the total amount of the project			100.0%			
2017 financing by the green and sustainability bond			1.9 million			
Timeline of project financing by previo	us green and sustainability bo	onds				
	2014	2015	2016	2017		
	_				•	
		€ 2.4 M	€ 8.0 M	€1.9 M		

15-

6.00

4 222

▶ QUALITATIVE PRESENTATION OF THE PROJECT

▶ PROJECT LIFECYCLE

- Construction of a building complex with 3,751 m² of floor space.
- Equipment that will support university research, by accommodating research laboratories working on the theme of the environment within the main campus of the University Paris- East Créteil-Valde-Marne.
- Certification process NF Tertiary Buildings HQE® approach to controlled energy management. The building also features bioclimatic design (based on the north-south orientation of a compact building).

- Operation delivered in August 2017.
- Performance audit completed; certification expected for 2018.

10 22

ø

13 122

15 2...

► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	49 FTEs	A-1
Integration FTEs supported by the project	3 FTEs	В
Number of beneficiaries of the project	379	D-11



► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIAS

Environmental management and eco- design	 Establishment of an environmental program. Certification process NF Tertiary Buildings - HQE® Approach (scheduling phase certification obtained on 22/06/2011 and design phase certification obtained 11/12/2012). "Worksite with minimal environmental disturbances" charter.
Combating climate change, and promoting the Region's environmental transition	 Consumption target PEC = 0.85 max PEC (PEC = Primary Energy Consumption). Connection to the urban heating network with use of renewable energy, of which 30% geothermal and 30% from waste incineration. Bioclimatic design and north/south orientation of the proposed building. High performance exterior insulation, natural ventilation and night-time over-ventilation. Outer envelopes optimized with appropriate general exterior solar protection.
Sustainable regional planning and improving quality of life	 Preservation of tree-shaded border of the campus in the vicinity of the new building. Very strong compactness of the building. No solar screen generated by the building's construction. Landscaped outdoor spaces with vegetation and infiltration device. Creation of a green plaza in the southern part. Rate of 72% waterproofing of the plot.
Socially inclusive development, combating inequality, and promoting the safety of individuals	Access for disabled people.
Respect for fundamental rights	 Participates in supporting higher education, research and development and contributes to the dissemination of science.
Responsible regional development	 Construction of an Environmental House for the purpose of giving visibility to the environmental research sector. Consolidation of research laboratories and of a science of the universe observatory forming a clearly identified centre in the lle-de-France dedicated to the environment. Strengthening of research in the lle-de-France by networking the players.
Regional economic development	 Creation of 49 FTEs and 5,480 hours of integration for the construction phase. Support the development of scientific employment through the creation of a "hard" science research cluster specific to the lle-de-France.
Fair practices, responsible purchasing and responsible supplier relations	 Application of the Public Procurement Code by the contracting authority as a whole. Requirements on the choice of construction products (traceability and to save on natural resources).
Consultation with stakeholders	 Keep the fact sheets for the operation that are intended for the regional executive Holding of user meetings every month. Participation of the researchers in the implementation of the installation's scientific equipment through specific meetings. Very regular discussions with the future users - researchers involved in the implementation of technical and security equipment over time. Monthly meeting is provided with the operators throughout the entire worksite. Holding of monthly "environmental quality" meetings on site with shared objectives and control of the corrective actions if necessary with all the worksite stakeholders.

MAISON DE L'ÎLE-DE-FRANCE

Projects: construction for higher education

Purpose			New construction		
Locations			Cité Internationale	Universitaire of Paris	
Key dates			Delivery in Septem	ber 2017	
Total project cost			€ 21.6 million		
Financing by the Region in the total amount of the project			100.0%		
2017 financing by the green and sustainability bond		€ 2.3 million			
Timeline of project financing by prev	ious green and sustainability	bonds			
	2014	2015	2016	2017	
			0		
		CIEM	C 12 8 M	6.27.14	
		€ 2.5 M	€ 12.8 M	€ 2.3 M	

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- Creation of 142 student accommodations in the Cité Internationale Universitaire de Paris.
- Positive energy building that goes beyond the regulatory purposes, in anticipation of the 2020 thermal regulations.
- Operation is part of the State-Region Project Agreement 2007-2014 and funded entirely by the Region, which is responsible for the contracting authority.
- An agency was named as prime contractor representative for performing the studies and monitoring of this operation. The building, with a surface area of 5,200 m², is developed on eight levels. It presents a unique geometry, with a large south wall that captures solar energy. In its center two energy storage tanks can be glimpsed, a technique never been implemented on this scale before. This system should allow the building to be nearly 70% self-sufficient in energy.

Pat II

▶ PROJECT LIFECYCLE

- Start of the construction site on 1 April 2015.
- At this stage: building inaugurated on 19 September 2017.
- To come: environmental monitoring of building performance.
 Modification of the photovoltaic installation to take advantage, while work was carried out, of the regulatory changes facilitating own consumption of the energy produced by the building.

► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	71 FTEs	A-1
Integration FTEs supported by the project	3 FTEs	В
Operation FTEs consecutive to the project	4 FTEs	C-1
Number of beneficiaries of the project	1,442	D-11
CO ₂ avoided by the project	13 CO ₂ teq/year	E-2

▶ JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and ecodesign	 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. Extended environmental commitment: grey energy, indoor air quality, autonomy in natural lighting, bio-sourced materials. Green worksite charter limiting the nuisances
Combating climate change, and promoting the Region's environmental transition	 Positive energy building, awarded in 2014 as part of the call for "BEPOS" projects organized by the ADEME (34kWhep/m² without ENR, exceeding 6 kWhep/m² with renewable energy). Release of 12.8 tons of CO₂ avoided via renewable energy: photovoltaic sensors on roof of the building and solar thermal energy with energy storage in two tanks of 110 m³ of water. Environmentally friendly materials used, taking the grey energy into account for the technical choices, recovery of rainwater, energy recovery from waste water from showers. Facades highly insulated.
Sustainable regional planning and improving quality of life	 Additional supply of housing intended for students in a highly deficient context within the lle-de-France. Landscaping project in support of the building with a strong focus on biodiversity, planting 25 new trees. High comfort levels for the housing: ventilation, quality of materials The thermal comfort in the summer is ensured by limiting solar heat gain by managing the blinds depending on the sunshine and by ceiling fans located in each bedroom. The building also includes a multipurpose room whose purpose is to host events focused around sustainable development (conferences, projections), a library, a hall, community kitchens
Socially inclusive development, combating inequality, and promoting the safety of individuals	 Completion of 8,300 hours of integration (i.e. full-time equivalent to 3 jobs) equal to 5% of the total number of hours. All the accommodations are accessible for people with disabilities.
Respect for fundamental rights	 The building is intended in part to house scholarship recipients from the lle-de-France ("masters-scholarships" mechanism helping foreign students to stay in France). Improves the living and study conditions for youth engaging in higher education.
Responsible regional development	Implementation of integration jobs.
Regional economic development	 The operation represents 71 jobs for the construction phase. For the operational phase, it represents 4 jobs.
Fair practices, responsible purchasing and responsible supplier relations	 Requirements on the choice of construction products (to save on natural resources, on CO₂ emissions). Requirements concerning the origin of materials (limitation on grey energy).
Consultation with stakeholders	 Constant dialogue with the future operator (Cité Internationale Universitaire de Paris) as part of a convention on the lle-de-France House, which defines in particular the actions to be taken to ensure compliance with the project's environmental goals once the building is completed. Information for the neighbouring houses (Cambodia House and Lebanon House). Awareness-raising of the future occupants on sustainable development: partnership with the IRCAM, the School of Fine Arts of Le Mans and the ENSCI in the context of the Master Sound Design in order to develop mechanisms to educate the future residents as to energy management.

Time laps Chantier : https://www.youtube.com/watch?v=rBM4doOWRN4

Agence d'architecture ANMA – Nicolas Michelin, présentation du projet : http://www.anma.fr/fr/projets/maison-de-lile-de-france/

Bureau d'études DEERNS - présentation: https://www.deerns.fr/references/batiments-publics/maison-de-lile-de-france-paris

Bureau d'études TRIBU : http://www.tribu-concevoirdurable.fr/references/logement/maison-de-lile-de-france-a-la-ciup-75.html

Construction 21: https://www.construction21.org/france/case-studies/fr/maison-de-l-ile-de-france.html

Inauguration de la Maison de l'Île de France : https://www.iledefrance.fr/sante-social/maison-de-l-ile-de-france-a-cite-universitaire-internationale-inauguree

ÉCOLE DES HAUTES ÉTUDES EN SCIENCES SOCIALES - CAMPUS CONDORCET NEW PROJECT

Projects: construction for higher education

Purpose	New construction
Locations	Campus Condorcet - Aubervilliers
Key dates	Competitive tender for worksite : 2018 ; expected delivery date : 1^{st} quarter 2020
Total project cost	€ 38.8 million
Financing by the Region in the total amount of the project	100.0%
2017 financing by the green and sustainability bond	€ 1.3 million

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- The construction of the EHESS research building is carried out by the lle-de-France Region, which is responsible for project management and 100% financing. Like the GED (great documentary space library), 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 with a pool.
- 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

11-

4 200

÷

ŵ

00

- Public tender for works in preparation
- At this stage: consulting companies about improvement of the grounds
- To come: start of ground improvement

▶ IMPACT INDICATORS

Indicator	Impact	Notice méthodologique
Worksite FTEs supported by the project	101 FTEs	A-1
Integration FTEs supported by the project	13 FTEs	В
Number of beneficiaries of the project	16,966	D-11
CO ₂ avoided by the project	24 CO ₂ teq/year	E-4

▶ JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmentalmanagement and ecodesign	 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. Extended environmental commitment: grey energy, indoor air quality, autonomy in natural lighting, bio-sourced materials. Green worksite charter limiting the nuisances.
Combating climate change, and promot- ing the Region'senvironmental transition	 Ambition in the energy field beyond regulatory obligations, i.e. the search for the "Effinergie +" level, which represents a 20% reduction in consumption. 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). No air conditioning but natural night ventilation. 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. Project located near the "Front Populaire" underground station.
Sustainable regional planning and im- proving quality of life	• Regional rebalancing in the field of higher education and research.
Socially inclusive development, combat- ing inequality, and promoting the safety of individuals	 Achievement of 17,000 hours of insertion (equivalent to 6 full-time jobs). Allocation of works contracts to facilitate access to public procurement for SMEs. Keeping a "Green Spaces" space for an employment structure (equivalent to 7 full-time jobs).
Respect for fundamental rights	 Improving the working conditions of doctoral students by offering them dedicated space.
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	 Requirements on the choice of construction products (to save on natural resources, on CO₂ emissions). Requirements concerning the origin of materials (limitation on grey energy).
Consultation with stakeholders	 Permanent consultation with future users (EHESS) and local authorities. Information for residents on the development of the Campus, via local authorities and the Campus Condorcet Public Institution.

GRAND ESPACE DOCUMENTAIRE (LIBRARY) - CAMPUS CONDORCET

Projects: construction for higher education

Purpose	New construction
Locations	Campus Condorcet - Aubervilliers
Key dates	Competitive tender for worksite : 2018 ; expected delivery date : 2nd quarter 2020
Total project cost	€ 102.3 million
Financing by the Region in the total amount of the project	100.0%
2017 financing by the green and sustainability bond	€ 3.3 million

NEW PROJECT

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- The construction of the GED library (Grand Espace Documentaire) is carried out by the lle de France Region, 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 lle-de-France LSSH researchers (Arts, Social Sciences and Humanities), and beyond for all national research in the humanities and social sciences.

▶ PROJECT LIFECYCLE

- Public tender under analysis.
- At this stage: ground improvement completed.
- To come: start of construction in April 2018.

► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	245 FTEs	A-1
Integration FTEs supported by the project	17 FTEs	В
Number of beneficiaries of the project	30,950	D-11
CO ₂ avoided by the project	285 CO ₂ teq/year	E-3



► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and ecodesign	 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. Extended environmental commitment: grey energy, indoor air quality, autonomy in natural lighting, bio-sourced materials. Green worksite charter limiting the nuisances
Combating climate change, and promot- ing the Region's environmental transition	 Optimisation of the bio-climatic design. Non-polluting and low-emitting materials used in volatile organic compounds (VOCs). No air conditioning and natural night ventilation. Heavy vegetation with greening of the terraces and the presence of gardens north and south of the building, to effectively combat heat islands. Project located near the "Front Populaire" underground station.
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). Improvement of the working conditions of PhD students and researchers by offering them dedicated documentation areas.
Respect for fundamental rights	Combating social, educational and regional inequalities.
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	 Requirements on the choice of construction products (to save on natural resources, on CO₂ emissions). Requirements concerning the origin of materials (limitation on grey energy).
Consultation with stakeholders	 Permanent consultation with future users (public scientific cooperation institution) and local authorities. Information for residents on the development of the Campus, via local authorities and the Campus Condorcet Public Institution.

LEISURE AND SPORT CENTRE

Project: construction of a sports complex of regional interest

			•	1 /373		
Purpose		New o	construction, renova	tion and developme	ent of the site	
Locations		Vaires	s-Torcy			
Key dates		Comm	nencement of work: 2	2016; End of the wo	ork planned in june 2019	
Total project cost		€ 90.	.0 million (current ar	mount)		
Financing by the Region in the total am	ount of the project	88.09	%			
2017 financing by the green and sustai	nability bond	€ 32.	6 million			
Timeline of project financing by previou	is green and sustainability bond	s				
	2014	2015	2016	2017		
	1MC	9.5 M€	22.5 M€	32.6 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, construciton 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 IIe-de- France.

• Co-financing with the State (Ministry of Sports, Youth, and Popular Education).

▶ PROJECT LIFECYCLE

- February 2016: launch of the work for the sports, accommodation and training centres and the artificial white-water course.
- March 2017: visit from International Olympic Commitee (IOC) experts.
- May 2017: visit from the IOC evaluation commiaee.
- September 2017: award of JOP 2024 and confirmation of the hosting of the Olympic rowing and kayak events
- Delivery forecast: April 2018 for sections 1, 2, 3; white water stage in February 2019; delivery of the site in June 2019.

► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	104 FTEs	A-5
Integration 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



► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

ſ

Environmental management and ecodesign	 Signing of a "Worksite with Minimal Environmental Disturbances Charter" with the contractors service providersundertaking 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. Worksite monitored by an HQE design firm that will ensure the commitments of the signatory contractors. Composting onsite and differentiated waste management during the operating phase. Use of wood for construction, which should have a PEFC or FSC label.
Combating climate change, and promoting the Region's environmental transition	 Renewable energy with ground water geothermal and solar thermal system for hot water in order to limit emissions of CO₂. Optimization of the energy performance of the building shell and choice of materials promoting thermal inertia (maintaining of the temperature). 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). 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. Water management in connection with the watershed, to favour sloped pathways that allow water drainage.
Sustainable regional planning and improving quality of life	 Project promoting access by alternative sor modes (pedestrians, bicycles, non-motorized boats), and providing a significant number of bicycle parking spaces. 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. Maintenance of green shorelines to the south and north of the site.
Socially inclusive development, combat- ing inequality, and promoting the safety of individuals	 Improved site accessibility for people with disabilities. 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. 30,000 hours of insertion are provided over the two years of work. 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". Pricing adjusted to promote access to the site for the greatest number of people.
Respect for fundamental rights	 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).
Responsible regional development	 Strengthens the attractiveness and the development of tourism in the region. Hosts international events, thus contributing to the image of the region. Rebalancing of the geography of major infrastructures in the east of the IIe-de-France.
Regional economic development	 The work on site will require 104.3 FTEs. The permanent jobs are evaluated at 29 people and indirect jobs will also be created related to the equipment maintenance and cleaning. Projected doubling of the current business turnover of the Leisure Island.
Fair practices, responsible purchasing and responsible supplier relations	 Application of the Public Procurement Code Allocation of the work procurement contract to promote competition and the SMEs' access to the procurement contracts. Use of materials that are economic in natural resources. Subcontractors approved by the Contracting Authority subject to the same rules as the contract holder.
Consultation with stakeholders	 Consultation of all the stakeholders of the project (sports movement, associations, communities, businesses) on the various phases of defining the development project. Implementation of a Project House on site to ensure the continuous proximity of information throughout the duration of the work. Creation of work groups to mobilize the territorial players around the definition of the future development project for the site.

35


PUBLIC TRANSPORT AND SUSTAINABLE TRANSPORTATION



Development of the public transport supply as an alternative to using the automobile, contributing to sustainable mobility, to the fight against climate change, and projects to improve the comfort, accessibility and safety of public transport users and of people living nearby the infrastructures.

• Leading transport policies in Ile-de-France, Region Ile-de-France participates in defining the transport organisation schemes with Ile-de-France Mobilités, which is the authority that organises public transport in the Ile-de-France. It co-finances large investment projects with its partners (such as State and General Councils).

• The extension of the 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 lie-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, the last major non–electrified Paris–provinces main line.

• Region's jurisdiction : mandatory.

• Form of intervention : subsidies to the contracting authorities (Ile-de-France Mobilités, RATP, SNCF, General Councils).

• Target : all of the lle-de-France inhabitants.

SUBWAY LINE 4

Projects: subways

						<u> </u>
Purpose		Extension to	Bagneux (phase 2)			
Locations		Montrouge and Bagneux				
Key dates		Commencer	commencement of civil engineering work: 8 July 2015; Projected commissioning: end 2020			
Total project cost		€ 307.1 milli	on (phase 2)			
Financing by the Region in the total am	ount of the project	60.0%				
2017 financing by the green and sustainability bond		€ 53.0 milli	€ 53.0 million			
Timeline of project financing by previou	s green and sustainability bonds					
	2014 C 27 M	2015 € 8.5 M	2016 C 4.6 M	2017 € 53.0 M		

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- The extension of line 4 to Bagneux is a major issue for the mobility of lle-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).

13 122

- ▶ PROJECT LIFECYCLE
- Extension to the Town Hall of Montrouge completed in phase 1, comissioning 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
CO ₂ avoided by the project	570 CO ₂ teq/year	E-3
Internal project profitability rate	10.8 %	F



Environmental management and ecodesign	 Preference for sustainable equipment and materials and for low energy consumption systems or that optimizes them: low consumption technologies, rainwater recovery. Objective of using devices that can support subsequent adjustments. 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 sur roundings.
Combating climate change, and promoting the Region's environmental transition	 An expected carryover from users of private cars to the subway, of about 4.5 million fewer vehicle-kilometres. Project that will reduce the costs related to the effects of pollution and the greenhouse gases of about 570 CO₂teq/year (CO₂ ton equivalents). Use of electrical energy for the project that will not contribute to air pollution and the greenhouse gases effect.
Sustainable regional planning and improving quality of life	 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). 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. The current users of public transportation will gain 10 minutes on average, and the carryover for cars will be 5 minutes. The ridership will be made up of: 89 % of riders who previously used public transit, 6 % of riders who previously used private cars (modal carryover), 5 % of new trips or riders previously making their trip on foot (induced ridership).
Socially inclusive development, combating inequality, and promotin the safety of individuals	 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". The project is in line with the fare structure in force for Ile-de-France, which is fixed by Ile-de-France Mobilités and which incorporates social fares financed by the Region to ensure access to mobility and public transport for the needlest.
Respect for fundamental rights	 Respect for fundamental rights of workers who worked on the construction site by addressing their safety and complying with health protection laws and regulations.
Responsible regional development	 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	 Prior consultation held in June/July 2001; public survey from 9 January to 10 February 2012. Establishment of information tools for neighbouring residents, shopkeepers and to monitor the work: brochures and information flyers, dedicated website. A community representative dedicated to dialogue with shopkeepers and residents during the construction phase.

SUBWAY LINE 11

Projects: subways

Purpose	Extension to Rosny-Bois-Perrier			
Locations	Paris, Les Lilas, Romainville, Noisy-le-Sec, Rosny-sous-Bois			
Key dates	Commencement of preliminary work: 2016; Projected commissioning: 2022			
Total project cost	€ 1,298.0 million			
Financing by the Region in the total amount of the project	42.9%			
2017 financing by the green and sustainability bond	€ 77.7 million			
Timeline of project financing by previous green and sustainability bonds				
2014 2015	2016 2017 € 2.8 M € 77.7 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 Ile-de-France Mobilités) and other funders (State, Société du Grand Paris, City of Paris and Department of Seine-Saint-Denis).

▶ PROJECT LIFECYCLE

15.

• The work was symbolically launched at an event organised on 10 December 2016.

a 10 111.

112

8 1000 Hole No. 9 1000

13 255

 \mathbf{O}

12 10001

00

• Civil engineering work have started in 2017.

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
CO ₂ avoided by the project	3,255 CO ₂ teq/year	E-3
Internal project profitability rate	7.9 %	F



Environmental management and ecodesign	• 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 ecodesign 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	 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. Expected reduction of greenhouse gases of 3,255 CO₂ teq/year.
Sustainable regional planning and improving quality of life	 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. In total, taking into account the time saved by other users and that due to the beaer station accessibility, the annual time savings amount to 4 million hours per year.
Socially inclusive development, combating inequality, and promoting the safety of individuals	 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. Integration of the project with the pricing in force in Ile-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
Respect for fundamental rights	 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.
Responsible regional development	 The project will serve 68,000 inhabitants and 14,500 jobs. The project supports several development sectors (ZAC Boissière-Acacia in Montreuil, ZAC Centre-Ville in Lilas, ANRU sectors). 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.
Regional economic development	 Estimated creation of 9,216 FTEs on-site. Around the metro stations, the new services represent an opportunity for businesses and economic activities. 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 lle-de-France.
Fair practices, responsible purchasing and responsible supplier relations	access to jobs and places of study in Ile-de-France. • 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.

SUBWAY LINE 14

Projects: subways

1 \$1994	" ————————————————————————————————————	8 1112111 1	9 202 202 202	10 101. (‡)	n sesser Alda	12	13 200

Purpose			Extension to mairie de	Saint-Ouen	
Locations		Paris, Clichy, Saint-Ou	en		
Key dates 0		Commencement of work: July 2013; Projected commissioning: mid-2020			
Total project cost			€ 1,380.0 million		
Financing by the Region in the tot	al amount of the project		12.8%		
2017 financing by the green and sustainability bond			€ 30.1 million		
Timeline of project financing by pr	evious green and sustainability bo	nds			
	2014	2015	2016	2017	
	€ 39 M	€ 23.1 M	€ 73.1M	€ 30.1M	

▶ 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, a list of operations for which it is a question of starting the work.

• Partners involved: joint contracting authorities (RATP and lle-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 work (construction of the stations, maintenance and storage site, excavation by the tunnelling machines to the maintenance and storage site and to the north of the future Pont Cardinet station at the future Porte de Clichy station, then Clichy Saint-Ouen, laying of tracks.
- The works carried out for Porte de Clichy station, carried out by the ICOP - Eiffage TP Fondations, under the contracting authority of RATP, have generated leaks. Repair and reinforcement measures have been taken. Acceleration solutions have been implemented to cover the delay.

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
CO ₂ avoided by the project	7,310 CO ₂ teq/year	E-3
Internal project profitability rate	10.0%	F



Environmental management and ecodesign	 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 ecodesign of the infrastructure, systems, equipment, which it specifies or designs, by the purchases that it makes. 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.
Combating climate change, and promoting the Region's environmental transition	 Expected modal shift by the users of cars or motorcycles towards public transit of 33,686,400 veh.km/year. Expected reduction in greenhouse gas emissions of 7,310 t eg.CO /year.
Sustainable regional planning and improving quality of life	 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. 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. 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).
Socially inclusive development, combating inequality, and promoting the safety of individuals	 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. The project is in line with the fare structure in force for Ile-de-France, which is fixed by the Ile-de-France Mobilités (Ile-de-France Transport Association) and which incorporates social fares financed by the Region to ensure access to mobility and public transport for the needlest.
Respect for fundamental rights	 Respect for fundamental rights of workers who worked on the construction site by addressing their safety and complying with health protection laws and regulations.
Responsible regional development	 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 lle-de-France: the project will ultimately serve 96,100 residents and 72,000 jobs. 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).
Regional economic development	 Estimated creation of 9,798 FTEs on the construction site.
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	 Public survey from January to February 2012 and DUP in October 2012. Information provided regularly to nearby residents on the progress of the stages of the project, holding of public information meetings, signage and targeted information leaers. 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. A special internet portal will be set up. Municipalities and related developers throughout the development and implementation of the metro project in the context of specific meetings (technical commiaee, monitoring commissions).

TRAMWAY LINE T4

Projects: tramways

Purpose			New branch between Bondy and Monxermeil			
Locations			Pavillons-sous-Bois, Livry-Gargan, Clichy-sous-Bois and Montfermeil			
Key dates			Commencement of work: 2015; Projected commissioning: end-2019			
Total project cost			€ 255.8 million			
Financing by the Region in the total amount of the project			49.0%			
2017 financing by the green and sustainability bond			€ 9.3 million			
Timeline of project financing by previou	s green and sustainabili	ty bonds				
	2014	2015	2016	2017		

▶ 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 tram way 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 (lle-de-France Mobilités and SNCF) and the other cofinanciers (State).

▶ PROJECT LIFECYCLE

- After earthworks started mid-October 2016, 2017 saw the start of infrastructure work: 1.2km of rails have already been laid; connection work on the existing line was completed in the summer of 2017; the construction of the electrical substations to power the tram has been started.
- The new T4 branch will be put into service in late 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



<u></u>	
Environmental management and ecodesign	 The work of the project is organised in such a way as to optimise their duration and reduce the nuisance to residents. On most sections of the new branch, the project plans to plant as many new trees as possible. 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 shir from the passenger car to the new tram line.
Sustainable regional planning and improving quality of life	 Average journey time reduction at the morning rush hour: 10 minutes for those already traveling by public transport, 5 min. for new users. The project, included in the "Espoir Banlieues" Plan, will support the urban redevelopment of a landlocked territory in great social difficulty by financing and undertaking the complete redevelopment of the public spaces served by the tramway. The project will restructure and beautify the living environment of local residents.
Socially inclusive development, combating inequality, and promoting the safety of individuals	 The tram stations meet the safety and accessibility criteria for all categories of users (emergency call terminals, CCTV cameras and remote signalling equipment). In terms of solidarity, the project will open up cities on a plateau that is currently separated from the structuring public transport lines in the lle-de-France region. The project is integrated with the pricing in force in lle-de-France, set by lle-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.
Respect for fundamental rights	 The project will meet users' mobility needs. 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.
Responsible regional development	 The project will enhance the attractiveness of the territory in an area marked by a high density of lan locked population. It will meet the new travel needs generated by urban and transport projects in the sector: Urban Renewal project, Bas Clichy project, ZAC Coeur de Ville in Montfermeil, Clichy- Montfermeil train station on line 16 of the Grand Paris Express, and the Tour Médicis project in Clichy.
Regional economic development	 Estimated creation of 1,816 FTEs on-site. Social clauses are inserted in works contracts to promote the local employment of people in difficulty.
Fair practices, responsible purchasing and responsible supplier relations	 In the framework of this project, the Region allocated subsidies to project owners lle-de-France Mobilités and SNCF, who are subject to the Public Procurement Code.
Consultation with stakeholders	 The preliminary consultation was organised from 1st September to 31 October 2009. The public inquiry was held from 10 December to 24 January 2013 and the Public Interest Order was issued on 12 September 2013. 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. For shopkeepers, a commercial mediator informs them, advises them and accompanies them through out the period of the works.

TRAMWAY LINE T9

Projects: tramways

/ 15m /	7 2222	8	9 202020	10 111	11 12 12 12 12	12 1000	13 255
tittit.	. ()	- M	/ 💑 /	÷		$\overline{\infty}$	\mathbf{O}

Purpose	New line between Paris and Orly ville			
Locations	Paris, Ivry-sur-Seine, Vitry-sur-Seine, Choisy-Ie-Roi, Thiais, Orly			
Key dates	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%			
2017 financing by the green and sustainability bond	€ 1.9 million			
Timeline of project financing by previous green and sustainability bonds				
2014 201	5 2016 2017 C 3.4 M C 1.9 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, Ivry-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 Ivry-sur-Seine, Vitry-sur-Seine, Thiais, Choisy-le-Roi, Orly, the EPA ORSA, Île-de-France Mobilités, and the Region are commiaed 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 (lle-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

- Preparatory works for the project were launched early 2016 and will be finished in 2018.
- Construction of an engineering structure under the RER C line and the LGV interconnection line to Orly, allowing access to the tramway maintenance and storage site, was carried out.
- The new T9 tramway line will be put into service in late 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
CO ₂ avoided by the project	1,338 CO ₂ teq/year	E-3
Internal project profitability rate	9.5%	F

Environmental management and ecodesign	 The work is organised in such a way as to optimise its duration and reduce the nuisance to residents. Creation of a "green ribbon" to dress up the tramway platform. 	
Combating climate change, and promoting the Region's environmental transition	 Shir 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. 1,338 teqCO, will be saved per year thanks to the project. 	
Sustainable regional planning and improving quality of life	 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 (shired from private cars and walking). The project will restructure and beautify the living environment of local residents, while respecting and highlighting the heritage and green characteristics of areas crossed. 	
Socially inclusive development, combating inequality, and promoting the safety of individuals	 The tram stations meet the safety and accessibility criteria for all categories of users (emergency call terminals, CCTV cameras and remote signalling equipment). The project is integrated with the pricing in force in Ile-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. 	
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. 	
Responsible regional development	 The project will increase the attractiveness of the territory in a densely populated area but not a equately served by public transport until now. 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. It will meet the new travel needs generated by urban and transport projects in the sector: ZAC du Plateau in lvry-sur-Seine, ZAC Rouget-de-Lisle and ANRU Balzac in Vitry-sur-Seine, ZAC du Port in Choisy-le-Roi, and Grands Voeux sector in Orly. 	
Regional economic development	 Based on current estimates, the project will create 2,863 FTEs on site. Social clauses are and will be inserted in works contracts to promote the local employment of people in difficulty. 	
Fair practices, responsible purchasing and responsible supplier relations	 In the framework of this project, the Region is allocating subsidies to project owner lle-de- France Mobilités, who is subject to the Public Procurement Code. 	
Consultation with stakeholders	 Prior consultation was organised in October / November 2012. The public inquiry was held in June / July 2014 and the Public Interest Order was issued on 2 February 2015. Information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures and a dedicated website. 	



TRAMWAY LINE T11 (NORTH TANGENTIAL)

Projects: tramways

Purpose		Nev	v tramway-train line	between Epinay and	Le Bourget (Phase 1)
Locations		Epi	Epinay-sur-Seine, Deuil-la-Barre, Montmagny, Villetaneuse, Pierrefitte, Stains, La		
		Cou	irneuve, Le Bourget		
Key dates		Cor	nmencement of work	: 2009; Commission	ing: July 2017
Total project cost		€ 6	10.9 million		
Financing by the Region in the t	otal amount of the project	49.	6%		
2017 financing by the green and	l sustainability bond	€1	5.3 million		
Timeline of project financing by	previous green and sustainability	bonds			
	2014	2015	2016	2017	
	·			——————————————————————————————————————	
	€ 41 M	€ 120.7 M	€ 49.1 M	€ 15.3 M	
					T

1 5...

tittit

▶ 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, Pierrefiae and Stains) to accompany more closely the already initiated economic development and actively revitalize these territories of Ile-de-France.
- Will enable the strengthening of the supply of transport on ring roads on Northern Territory Ile-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: Project contracting authorities (SNCF, Ile-de-France Mobilités, organising transport authority) and other financers (The State, Department of the Seine-Saint-Denis and Department of Vald'Oise).

13 132

00

▶ 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
CO ₂ avoided by the project	20,700 CO ₂ teq/year	E-3
Internal project profitability rate	11.0%	F

Environmental management and ecodesign	 Maintenance site of trains under construction at Noisy-le-Sec, which will include a green roof, photovoltaic panels and a rainwater recovery system. HQE approach to railway station construction (notably eco-responsible materials). 	
Combating climate change, and promoting the Region's environmental transition	 Modal shift ratio from the private car to the new tram-train line estimated at 19%. Reduction of pollution with savings estimated at 20,700 teqCO₂ per year (phase 1 only). 	
Sustainable regional planning and improving quality of life	 The average time saving for a public transport user is estimated at 8.7 minutes per journey. 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. Goal of optimal integration of railway stations in sites: buildings designed to blend into the landscape 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. 	
Socially inclusive development, combating inequality, and promoting the safety of individuals	 The project will participate in the fight against territorial inequalities. It is indeed listed in the Plan Espoir Banlieues, initiative aimed specifically at opening up problem neighbourhoods by improving their access to public transport. The project is in line with the fare structure in force for Ile-de-France, which is fixed by the Ile-de-France Mobilités (Ile-de-France Transport Association) and which incorporates social fares financed by the Region to ensure access to mobility and public transport for the needlest. 	
Respect for fundamental rights	 Respect for fundamental rights of workers who worked on the construction site by addressing their safety and complying with health protection laws and regulations. 	
Responsible regional development	 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. Will enable to connect lle-de-France activity hubs and universities to each other, without crossing Paris (Université Paris-Villetaneuse, La Plaine Saint-Denis et Le Bourget). 	
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	 Pre-consultation in 1999, then in 2003 on a new variant corresponding to the current project. 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 May 2008. Information packs for residents, inhabitants and traders were made available for monitoring the work: brochures and information flyers, dedicated website. 	

http://www.tram11express.fr/

TRAMWAY LINE T12

Projects: tramways

Purpose	New line between Massy-Palaiseau and Evry Courcouronnes			
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	Commencement of work: 2017			
Total project cost	€ 576.7 million			
Financing by the Region in the total amount of the project	55.8%			
2017 financing by the green and sustainability bond	€ 11.3 million			
Timeline of project financing by previous green and sustainability bonds				
2014	2015 2016 2017 C 74 M C 11.3 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 Ile-de-France, connecting to the existing (RER, Transilien) and coming (Grand 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), lle-de-France Mobilités and other funders (the State, Department of Essonne).

10 122

13 232

00

8 (200 000) 9 200

▶ PROJECT LIFECYCLE

15.

1.11.1

• A memorandum of understanding to secure the financing for the rest of the work was approved in 2017 by all the partners involved in this operation..

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
CO ₂ avoided by the project	2,534 CO ₂ teq/year	E-3
Internal project profitability rate	5.8%	F

Environmental management and ecodesign	 The SNCF, the project owner, is commiaed to social responsibility and aims in particular to reduce the environmental impacts of its projects. 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). The facilities along the route incorporate cycling facilities ensuring the best possible continuity with existing bike routes.
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	• The new line will improve the quality of life of users in the lle-de-France region: the average time saved for a public transport user is estimated at 6 minutes per trip.
Socially inclusive development, combating inequality, and promoting the safety of individuals	 The project helps open up districts that are located near the T12 express. In terms of solidarity, the new T12 Express line will be integrated with the pricing in force in lle-de-France, set by lle-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.
Respect for fundamental rights	 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.
Responsible regional development	 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). 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).
Regional economic development	• Based on current estimates, the project will create 4,095 FTEs on site.
Fair practices, responsible purchasing and responsible supplier relations	 In the framework of this project, the Region allocated subsidies to project owners lle-de-France Mobilités, SNCF Mobilités and SNCF Réseaux, who are subject to the Public Procurement Code.
Consultation with stakeholders	 Prior consultation was organised between May and July 2008. 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. Information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures and a dedicated website.

http://www.tramtrain-massyevry.fr/

EOLE



▶ 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 State, Société du Grand Paris, SNCF Réseau, City of Paris, Departmental Council of Hauts-de-Seine, Departmental Council of Yvelines, Ile-de-France Mobilités.

▶ 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.
- 2017: beginning of work, including beginning of digging towards Paris.

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
CO _z avoided by the project	8,040 CO ₂ teq/year	E-3
Internal project profitability rate	9.6%	F



Environmental management and ecodesign	 Site eco-design logic: management of construction waste, discharge of pollutants, limitation of nuisances caused by the site (noise, pollution, vibration, lighting, transport of dangerous materials,).
Combating climate change, and promoting the Region's environmental transition	 Shift in transport modes estimated at 67 million veh.km in 2020, with annual growth of 1%. 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. Estimated savings, due to the modal shir from road to rail, of 8,040 teqCO₂ per year.
Sustainable regional planning and improving quality of life	 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. Yearly time saved: on average 6 minutes, equal to 18 million hours per year.
Socially inclusive development, combating inequality, and promoting the safety of individuals	 Promotes opening up the territory and is fully part of a will to fight against inequalities between territories. 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. The number of hours of insertion for civil works is estimated at 70,000 for the Yvelines department and 720,000 for Paris and Hauts-de-Seine: 14,951 hours of insertion completed in February 2017.
Respect for fundamental rights	 By promoting intermodality and better service in the region, this project promotes the right to come and go.
Responsible regional development	 The project participates in the development and dynamization of the region, and promotes the urban rehabilitation and urban development of Seine Aval. 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.
Regional economic development	 Estimated job creation at 26,554 FTEs. 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. In addition, the extension will result in the creation of jobs for transport agents.
Fair practices, responsible purchasing and responsible supplier relations	 Subsidies from the Region granted to the Contracting Authorities, themselves subject to the Public Procurement Code.
Consultation with stakeholders	 Public debate: autumn 2010. Public inquiry: from 16 January to 18 February 2012 and the Decision on Public Utility published on 31 January 2013. 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.

LINE P (PARIS-TROYES)

Projects: railway links

Purpose	Electrification of the railway line between Paris and Troyes
Locations	Paris to Troyes
Key dates	Commencement of work: 2017
Total project cost	€ 320.0 million
Financing by the Region in the total amount of the project	23.3%
2017 financing by the green and sustainability bond	€ 1.0 million

1.5.

1.11.1

NEW PROJECT

▶ 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 Seine- et-Marne and that of Aube (Greater East Region), involving economic development issues and offers users in this area beaer 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), Ile-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

• A Memorandum of Understanding to secure funding for the remaining work was approved in 2016 by all partners involved in this project.

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
CO ₂ avoided by the project	50,000 CO ₂ teq/year	E-6
Internal project profitability rate	2.5%	F

Environmental management and ecodesign	 SNCF, project owner, is commiaed 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. 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.
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	 The electrification project will improve the quality of life of the users of the regions concerned: im provement of the quality of service and regularity of trains. The project will allow the renewal of rolling stock with modern, efficient trains.
Socially inclusive development, combating inequality, and promoting the safety of individuals	 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. In terms of solidarity, this line will be integrated with the pricing in force in Île-de- France, set by lle-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.
Respect for fundamental rights	 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.
Responsible regional development	 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. 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
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	 Prior consultation was organised between March and July 2011. 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. 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.

Lien site internet dédié : http://www.electrificationparistroyes.fr/

BUS ON OWN SITE OF MASSY-SACLAY

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

Purpose		New	line between Massy	-Saclay and Saint-Q	uentin-en-Yveline	s
Locations			Palaiseau, Orsay, Gif sur Yvette, St Aubin, Saclay			
Key dates		Comr	Commissioning: 2016			
Total project cost		€ 58	€ 58.0 million			
Financing by the Region in the total	amount of the project	41.04	%			
2017 financing by the green and sustainability bond		€ 0.3	€ 0.3 million			
Timeline of project financing by prev	vious green and sustainability be	onds				
	2014	2015	2016	2017		

1 See Bebbet

▶ QUALITATIVE PRESENTATION OF THE PROJECT

▶ PROJECT LIFECYCLE

÷

00

Commissioning: 2016.

€ 9.1 M

- Specific Site Public Transport Project (TCSP) to serve the Plateau of Saclay, centre of excellence regrouping schools and research centres, and which will foster its economic growth. The project participates in the aim to establish a global innovation hub, which will be based on ongoing exchanges between higher education, research and businesses dedicated to the creation of employment and growth.
- Section that extends about 6.5 km and serves 11 stations with a frequency of 5 minutes during rush hours.
- This project has set itself the objectives to meet the agricultural vocation and landscaped equilibria of the Saclay Plateau with implementation of appropriate resources in order to preserve the diversity and balance of the natural environment on which teams must intervene (e.g.: restoration of 12,000 m² of wetlands).
- Partners involved: Project contracting authority lle-de-France Mobilités and other financers (State and Department of Essonne).

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	412 FTEs	A-2
Integration FTEs supported by the project	4 FTEs	В
Number of beneficiaries of the project	10,000	D-13



Environmental management and ecodesign	 Consideration for environmental issues (noise, air, water, biodiversity). Construction was carried out taking measures to preserve the environment, especially with the commitment of the contracting authority to compensate for construction impact on wetlands. The construction site schedule was designed to limit, as much as possible, inconvenience for residents, farmers and motorists in the area.
Combating climate change, and promoting the Region's environmental transition	 Project promoting continuity of sor traffic and liberating traffic congestion constraints, responsible for significant irregularity problems, to offer a real alternative to the use of the car. Objective not to impair the natural environment made up of wetlands during the construction and beyond, and to preserve to the maximum the ecological areas present (limitation of impacts and restoration of access and agricultural features). Tree felling outside of nesting periods and new animal habitats built. As many trees have been planted in the framework of the project as trees cut to allow for this achievement. Restoration of 12,000 m² of wetlands on a site near the future own bus lanes
Sustainable regional planning and improving quality of life	 Neat urban insertion favouring soft modes and bicycle paths. The contracting authority has chosen quality materials for surface coating and the bus line stations in the bus lanes, and in order to physically mark the separation of the track, the hues of bitumen of roadways, cycling paths and pavements will be different.
Socially inclusive development, combating inequality, and promoting the safety of individuals	 This project thus promotes the opening up of the territory and fully subscribes to an effort to fight against inequalities between territories. Integration clause by economic activity, with 8,600 hours on all of the construction being the equivalent of 4 jobs.
Respect for fundamental rights	• By promoting intermodality and a better coverage of the territory, this project promotes the right to come and go.
Responsible regional development	 The enhancement of the attractiveness of this sector has promoted its economic development. Offers fast connection on the sections of RER B and C to Massy and Saint-Quentin-en- Yvelines and the future tram-train Massy - Evry, as well as to transport infrastructures of national or international importance, current (gare TGV Massy, Aéroport D'orly) or future (automatic metro bypass project).
Regional economic development	 Improves access to the Plateau de Saclay identified as a strategic sector for economic development, research and advanced training at international level. Work-related employment support.
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	 Public consultation from 10 May to 11 June 2010, which enabled choosing one of two variants of proposed track. Public survey from 6 January to 6 February 2012. Statement of public interest on 3 August 2012. Partnership with the Public Institution Paris-Saclay, which participates actively on the one hand in the TCSP development from the cluster viewpoint, and, on the other hand, with the municipalities of Plateau de Sarclay and the Agglomeration du Plateau de Saclay in the context of project management.

RAILWAY STATION OF SAINT-DENIS

Example of project from the scheme Master plan for accessibility



Purpose	Accessibility of the train station		
Locations	Saint-Denis		
Key dates	Commencement of work: mid-2018; Projected commissioning: end-2021		
Total project cost	€ 58.2 million		
Financing by the Region in the total amount of the project	25.1%		
2017 financing by the green and sustainability bond	€ 1.8 million		
Timeline of project financing by previous green and sustainability bonds			
2014 2015	2016 2017 C 1.8 M C 1.8 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 gebng on the train, the creation of a new underpass under the platforms with the installation of escalators and lirs, 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 IIe-de-France rail network, 143 are to be made accessible in

this context. At the end of 2016, there were already 77 stations which were made accessible in this context.

• Partners involved: project owners (SNCF Réseaux and SNCF Mobilités) and Ile-de-France Mobilités.

▶ PROJECT LIFECYCLE

- The pre-project file was delivered by the client in 2016, who was able to launch the project completion stage.
- The work started at the end of 2017 and commissioning is planned for 2023.

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 ecodesign	 The elements remodelled within the stations are subject to an HQE approach (ecoresponsible materi- als 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 shir from private cars to public transport lines for mobility-impaired users.
Sustainable regional planning and improving quality of life	 The project will help to improve the environment of the stations impacted for everyone: new platforms, installation of elevators or escalators. 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.
	 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.
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).
	 Maintaining good safety conditions by adapting the facilities to the flow of passengers, especially when evacuating platforms.
	 Installation of a lir in the travellers' building.
	 Liring of platforms so that the disabled can get on trains by themselves.
Respect for fundamental rights	 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.
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 the lle-de-France region.
Fair practices, responsible purchasingand responsible supplier relations	 Within the framework of the projects supported by the Region, the grants awarded to the contracting authorities (SNCF Réseau and SNCF Mobilités for this project) are subject to the Public Procurement Code.
Consultation with stakeholders	 Each project is subject to the legal obligations of prior consultation with the public. 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.



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 submibing the projects.

• Target : residents of the lle-de-France area.

Indicative information on some actions conducted in 2017:

- > 1 deep geothermal energy project supported in 2017,
- > Surface of green roofs installed in 2017: 7 033 m²

BREAKDOWN OF SUSBSIDIES PAID IN 2017



GEOTHERMAL ENERGY AT GRIGNY-VIRY CHÂTILLON

Example of project from the scheme Energy policy and transversal actions

Objet			Creation of the heating	g network and conn	ection to the network
Locations			Grigny and Viry-Châti	llon	
Key dates			First drilling: autumn 2 mid-December 2017	2016; Third wells dri	lling: end 2017; Commissioning:
Total project cost			€ 15.1 million		
Financing by the Region in the t	otal amount of the project		13.3%		
2017 financing by the green and sustainability bond ${ m C}$ 1.4			€ 1.4 million		
Timeline of project financing by previous green and sustainability bonds					
	2014	2015	2016	2017	

QUALITATIVE PRESENTATION OF THE PROJECT

- This project is part of the regional strategy to fight against climate change and development of local renewable energy, in order to limit the dependence of the lle-de-France region on fossil fuels and to reduce the energy bill of the lle-de-France region.
- Creation of a geothermal doublet on the DOGGER to recover geothermal heat (water at 71°C), with the connection of the consumption units to the future distribution network which will be spread over 15,115 linear meters.
- Potential of 11,600 dwellings and 49 buildings of local public services identified on the future heating network in the cities of Grigny and Viry-Châtillon.
- Objective to cover 60.8% of the heat requirements identified on the future distribution network. The remainder will be covered by a heat pump (10.6%), gas (28.1%) and heating oil (0.5%).
- Partners involved: the general contractor (local public company created by SIPPEREC and the two municipalities concerned), cities of Grigny and Viry-Châtillon, ADEME as co-financer.

▶ PROJECT LIFECYCLE

- Drilling of the two wells completed.
- One of the two wells does not have the characteristics imagined by the previous geological studies and does not allow an industrial commissioning in its current state. The rules for drilling were scrupulously respected and the construction site companies are not involved; the reason is an unpredictable local geological hazard (the water table does not have the expected flow on this borehole while there is no problem for the other borehole).
- The project initiator filed a claim for a specific insurance for the nonproductive well that will allow it to make another well in replacement.
- A third drilling was carried out in 2017 to make use of the installation and showed similar characteristics to the first drilling.
- All the buildings to be connected have been contractually committed.
- The geothermal installation and the heating network were commissioned in mid-December 2017.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	106 FTEs	A-2
Number of beneficiaries of the project	27,028	D-7
CO ₂ avoided by the project	15,000 CO ₂ teq/year	E-5



	 Taking account of nuisances on the site.
Environmental management	Waste treatment in the appropriate channels.
and ecodesign	• Water treatment to preserve the quality of the resource.
	 Use of products as recyclable as possible or not harmful to the environment.
	. Droight goal/ing to develop local repowerble aparaisa
Combating climate change,	Froject seeking to develop local renewable energies.
and promoting the Region's	• Expected energy savings equivalent to $15,000$ tequo ₂ per year.
	per year.
	Project apparent the evel situation of least receivers (DOC CED actificat)
Sustainable regional planning	 Project enhancing the exploration of local resources (DOGGER aquiter). 11.6.00 homes will be efficient exectly exectly.
	11,600 nomes will benefit from geothermal energy.
Socially inclusive development,	Reduced energy bills for connected dwellings.
combating inequality, and promoting	 Contributes to the rescue plan for a block of flats with 5,000 dwellings.
Respect for fundamental rights	Promotes access to renewable energy, helping to support the living standards of households in favour
	of a constant improvement of their living conditions.
	 Project helping to strengthen the share of renewable energies in lle-de-France and geothermal energy
Responsible regional development	in particular, which is a specialty in the lle-de-France region: 36 geothermal doublets active in lle-de-
	France in 2014, with 180,000 dwellings benefiting from it (source ADEME 2014).
Regional economic development	 Creation of jobs within the supporting structure for the phases of work.
	 Support the momentum of renewable energy development in the region.
Fair practices, responsible purchasing	• Application of the Public Procurement Code by the project representative
and responsible supplier relations	Application of the Fublic Frocurement 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.
	 Multi-stakeholder steering commiaee with funders.
	 Association those who monitor the project's operations.



BIODIVERSITY

Projects contributing to the preservation of biodiversity, natural habitats and landscapes and the development of parks.

The policy is aimed both at protecting natural environments and biodiversity in the IIe-de-France region, and at technically and financially supporting the strategies and actions contributing to the preservation, restoration and enhancement of aquatic and wetland environments.

A regional "Green Plan" was launched in 2017, in order to incorporate nature everywhere for all, and to encourage the greening of towns and villages. In the autumn of 2016, a consultation was organised with all the actors, experts, professionals and associations, with a simple objective: to achieve the net creation of green areas in IIe-de-France by 2021 and improve the accessibility of the nearby green spaces.

• **Region's jurisdiction** : the Region co-developed the SRCE (Regional Ecological Coherence Schema) with the State. The Act of January 27 2014 to modernize territorial public action and the assertion of metropolis confers to the Region the leader in biodiversity and its skills in this area will lead to development with the biodiversity Act.

• 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.

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

BUTTE PINSON NEW PROJECT

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

Purpose	Restoration work of the southern park of the Butte Pinson
Locations	Southern park of Butte Pinson, city of Villetaneuse
Key dates	Commencement of work: 2016; Inauguration expected in 2018
Total project cost	€ 1.0 million
Financing by the Region in the total amount of the project	100%
2017 financing by the green and sustainability bond	€ 0.4 million

1.44

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- Development and acquisition project for the Butte Pinson, which is a long term project:
- 1985: Creation of PRIF (regional perimeter of land intervention) of Butte Pinson,
- 1986: Creation of a separate land management zone
- 1995: Creation of a natural area perimeter by the Seine-Saint-Denis General Council
- 2000: Declaration of South-Montmagny sector as a public utility, extended on March 14, 2005
- 2001: Creation of a natural area perimeter by the Val-d'Oise County Council
- 2009: Decree of DUP Nord-Groslay and Montmagny Sector, extended on October 15, 2014
- 2010: Master Plan of Butte Pinson
- 2010-11: Green Belt Development (1.1 km)
- 2013: Acquisition by the Ile-de-France Region of the 8 ha of the former departmental park
- 2014 : Development of 1,2 ha of allotments
- 2018: Launch of the second phase of compulsory purchases in the northern Nord-Groslay and Montmagny sector
- 2018-2019: South Park renovation and cleaning up works
- Rehabilitation of the old 8-ha departmental park. Former gypsum quarry, backfilled with various waste that was sometimes very polluted, with problems of soil instability, causing problems for such items as fountains, waterfalls, pond.

- Establishment of more nuanced and more suitable management, under strong demand from users, with a phytosanitary diagnosis which made it possible to proceed to the cubng down of many diseased or dangerous trees. Soil and geotechnical surveys have been carried out to adapt the range of plants of future plantations.
- Aims of issue-oriented project:
- Environmental (polluted site, habitat restoration, work on biodiversity, control of rainwater),
- Social services (place for public in dense urban areas, playground facilities for children),
- Landscaping (improving an existing, dilapidated park, uncovering panorama of the Paris region).
- Partners: project led by the Green Spaces Agency, an associated organization of the Region Ile-de-France and which participates in the implementation of its environmental policy.

▶ PROJECT LIFECYCLE

- September 2017-2018, execution of the development work: earthworks and partial depollution, sanitation of various networks; alternative rainwater management and wetland management; reopening pathways and accessibility improvement; shrub and tree planting; development of entrances related to the urban fabric and site facilities, development of playground for children and a basketball area.
- Summer 2018: partial opening of the site
- 2019: depollution and work on the pond
- 2018-2021: maintenance work on landscaping.

Number of beneficiaries of the project	120 000	D-6	
Indicator	Impact	Methodological note	
► IMPACT INDICATORS			



Environmental management and ecodesign	 AEV's commitment to biodiversity when carrying out the works and to carry out lowdisturbance building sites. Objectives of limiting soil compaction; recover, store and re-use excavated soil on site; respect for soil in order to preserve the existing seed bank; to limit noise pollution and maintain cleanliness around the site. Strong penalties applied for damage to trees during the construction phase. Remodelling of the site with an excavation / refill balance (reuse of excavated soil): of the 5,600 m³ of terracing. Areas that were too polluted had to be exported to appropriate sectors, giving priority to bio-centres. The tree areas were filled with site soil enriched with mulch. Land that is too polluted will be taken away to keep the site safe.
Combating climate change, and promoting the Region's environmental transition	 Selection and felling of many diseased trees to regenerate the park. Rediscover diversified ecosystems (wet environments, pond, edges, pine forest etc) Planting 200 trees, nearly 500 shrubs and over 6000 perennials. Pruning, restoration of existing woodlots. Open air rainwater management, allowing the creation of new wetlands once fed with city water.
Sustainable regional planning and improving quality of life	 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. Improved public facilities by equipping the site with benches, a children's playground, a basketball area (restoration of the park's original facilities) by offering user-friendly pathways and refurbishing the entrances. Objective to offer the public an area for fresh air and walking, recreation and quality games in a municipality lacking in green and wooded areas.
Socially inclusive development, combating inequality, and promoting the safety of individuals	 Making the site safe: the south park of Butte Pinson is an old quarry backfilled indiscriminately with various materials, sometimes highly polluted. The old facilities (pond, waterfall, fountains) designed with the park in the 1990s, proved to be incompatible with this varied, contaminated soil. The polluted materials were covered under a layer of topsoil sufficient to eliminate any danger for users. Siring will be carried out to limit export volumes in suitable ways. Accessibility for the greatest number: user-friendly paths given the topography of this old quarry, and accessibility for people with reduced mobility over the entire plateau, being a walk of about a kilometre.
Respect for fundamental rights	 Reopening green spaces to the public for constant improvement of people's living conditions.
Responsible regional development	 The goal of Butte Pinson is to create a natural area of almost 120 ha in an area lacking in green space. The project of the South Park of Butte Pinson represents an area of 8 ha of natural and recreational space. Located at the southern end of the hill, it creates a new extension to the urban and green areas of the local municipalities.
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	 All work complies with the public procurement code. PEFC or FSC certification for wood used in development work. Label "true local grainland" or equivalent requested in the special technical specification.
Consultation with stakeholders	• The project was implemented together with the city of Villetaneuse and the EPT (Public Territorial Establishment) of Plaine Commune, which committed to participation in the maintenance costs of the site including playgrounds. The 250 m² playground has been included in the project due to strong demand from the residents. The play frames were chosen during a joint design workshop with a group of users and the municipality of Villetaneuse.

http://www.aev-iledefrance.fr/les-missions/ouvrir-les-espaces-naturels-au-public/les-grands-projets/projet-la-butte-pinson-renaissance-d-une-friche

DEVELOPMENT WORK OF THE MARNE RIVERBANK

Example of project from the scheme Protection of biodiversity, water policy and transversal actions

NEW PROJECT

 $\langle 0 \rangle$

Purpose	Development of 1,280 meters of banks of the left bank of the Marne
Locations	Noisy-Le-Grand
Key dates	Work in progress
Total project cost	€ 1.3 million
Financing by the Region in the total amount of the project	40.0%
2017 financing by the green and sustainability bond	€ 0.4 million

1 8.994

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- The regaining the banks of the Marne is a major challenge for the municipality of Noisy-le-Grand, which wants to further improve the quality of life of its citizens and develop its tourism, leisure and ecological potential in relation to the river.
- A project that is part of the municipal plan for the development of the banks of Marne throughout the Noisy area.
- The current state is very non-natural: straight banks whose base is protected by concrete slabs, linked riprap or sheet piling; Only 170 meters of the banks have stayed natural (Rive Charmante sector); there is a footpath along the banks is present, but largely concreted over.
- Objective is to enhance the Marne's banks, from an ecological, landscaping and activities point of view, as part of a strategy of urban renewal.
- It is a question of restoring the ecological continuity of the bank and strongly diversifying the natural habitats; adjust the surroundings in

line with the landscape and the living environment; review the traffic in the upper part of the bank.

As part of this project, the Region supports the development of 1,280 meters of banks on the left bank of the Marne, in two sectors: the area called Rive Charmante, between rue Leclère and rue du Vieux Moulin, 745 meters, and the sector to the right of the Marne treatment plant downstream of Siaap, between the two railway bridges, 535 meters.

► PROJECT LIFECYCLE

- April 2016: Start of work.
- Expected completion in 2018.

Indicator	Impact	Methodological note
Number of beneficiaries of the project	62,900	D-6



Environmental management and ecodesign	 Application for authorization / declaration relating to "law on water" procedures. 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. 	
Combating climate change, and promoting the Region's environmental transition	 Recomposition after removal of concrete sections of banks, positive to biological habitats (aquatic and on land) of particular ecological interest. Promote optimal diversification of riparian vegetation in order to promote the ecological value of the environment (improvement of biodiversity). Improve the attractiveness of this section of bank for the animal and particularly fish populations. 	
Sustainable regional planning and improving quality of life	 Improvement of the attractiveness and use of the banks of Marne in the Noisy area. 	
Socially inclusive development, combating inequality, and promoting the safety of individuals	• Development of public access points to the Marne.	
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. 	
Respect for fundamental rights Responsible regional development	 This project was the subject of an environmental and health analysis of the impacts of the project as part of a public inquiry. Develop a consistent urban strategy combining local projects or ones developed by other authorities (State, regional and departmental councils, neighbouring municipalities) to different area scales. Ensure the mix of the functions of the Marne (economic, environmental, social) by allowing the coexistence of the different uses of the waterway: protection of natural environments and, as far as possible, reconstruction ecological continuity in all directions, tourism and recreation, freight transport. 	
Respect for fundamental rights Responsible regional development Regional economic development	 This project was the subject of an environmental and health analysis of the impacts of the project as part of a public inquiry. Develop a consistent urban strategy combining local projects or ones developed by other authorities (State, regional and departmental councils, neighbouring municipalities) to different area scales. Ensure the mix of the functions of the Marne (economic, environmental, social) by allowing the coexistence of the different uses of the waterway: protection of natural environments and, as far as possible, reconstruction ecological continuity in all directions, tourism and recreation, freight transport. Increase the number of visitors to promote the use of public spaces through the improvement of existing facilities. 	
Respect for fundamental rights Responsible regional development Regional economic development Fair practices, responsible purchasing and responsible supplier relations	 This project was the subject of an environmental and health analysis of the impacts of the project as part of a public inquiry. Develop a consistent urban strategy combining local projects or ones developed by other authorities (State, regional and departmental councils, neighbouring municipalities) to different area scales. Ensure the mix of the functions of the Marne (economic, environmental, social) by allowing the coexistence of the different uses of the waterway: protection of natural environments and, as far as possible, reconstruction ecological continuity in all directions, tourism and recreation, freight transport. Increase the number of visitors to promote the use of public spaces through the improvement of existing facilities. Application of the public procurement code by the project owner. 	



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 jurisdictiion : 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.

LE PARC DE L'ABBAYE - MEDICO-EDUCATIONAL INSTITUTE

Example of project from the scheme Support for social actions

Purpose	Rehabilitation work of the institute
Locations	Saint-Maur
Key dates	Commencement of work: August 2016
Total project cost	€ 3.1million
Financing by the Region in the total amount of the project	22.6%
2017 financing by the green and sustainability bond	€ 0.3 million

1.5....

8.444

13 255

 ∞

Ω

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- Objective of redeveloping the "The Abbey Park" medical-educational institute (IME) for epileptic children with rare disabilities, in order to better meet the changing needs of the population and its high dependency level, and the need to improve quality of the residential facilities.
- Better quality of care and working conditions for the supervisory staff contributes to better treatment of the behavioural disorders of the children in residence.
- The areas cleared by the former boarding school made it possible to adapt the day-care facilities to the complexity of the care of with increasing behavioural problems upon admission. This redevelopment work has made possible to make the site accessible for people with reduced mobility, and to renovate the kitchen.
- Co-financers: no co-financers; 74% of the project is financed by the proceeds of capital disposals.

• Launch of rehabilitation work in August 2016

▶ PROJECT LIFECYCLE

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	17 FTEs	A-4
Integration FTEs supported by the project	1 FTEs	В
Operation FTEs consecutive to the project	56 FTEs	C-5
Number of beneficiaries of the project	53	D-8
CO ₂ avoided by the project	243 CO ₂ teq/year	E-7


▶ 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. It is planned to significantly reduce energy consumption. The end goal is a 50% reduction and consumption of less than 150 Kwep / m^2 / year.
Combating climate change, and promoting the Region's environmental transition	 Replacement of the fuel boiler with a more energy efficient gas boiler. Thermal insulation with the replacement of existing windows.
Sustainable regional planning and improving quality of life	 Redevelopment that will allow the creation of 7 groups of 2 rooms, for to better handle the children. 53 patients and their families will be received, with improved living conditions. Creation of specific activity rooms with in particular water games. Renovation of the canteen.
Socially inclusive development, combating inequality, and promoting the safety of individuals	 The project will be 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 by promoting the development of the children and adolescents whom we take in, thus providing their families with greater peace of mind allowing them to live "a normal life" in spite of the major handicap of their children and the separation caused by boarding out during the week.
Responsible regional development	 Project that meets a shortage of this type of facility in the area. Will make it possible to sustain crucial facilities for the families concerned and for the Val-de- Marne department.
Regional economic development	 Maintenance of employment within the IME. Support for 17 full time equivalents on site.
Fair practices, responsible purchasing and responsible supplier relations	• Organisation of instalments of suppliers in short deadlines in order to facilitate the life of the SMEs chosen for this project and thus to have a constructive relationship.
Consultation with stakeholders	 The Regional Health Agency of lie de France has given its agreement for this project. It has participated significantly in financing the construction of the residential home, the first phase of the restructuring of the place.



SOCIAL HOUSING

Projects for the development and renovation of the social housing stock, addressing environmental and social requirements, and contributing to access to housing and improved comfort.

In addition to its support for the new social housing supply (creation and rehabilitation), the regional policy implemented since 2016 aims in particular to focus efforts towards re-launching the creation of transitional housing for the middle class. It offers an answer to difficulties of the middle class to find housing in Ile-de-France and to promote social diversity. In total, in 2017, regional aid helped support the construction of 5,445 new social housing units and 2,087 student housing units (ie 2,440 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 AND STUDENT RESIDENCE AT BRY-SUR-MARNE

Example of project from the scheme Support for social housing

Purpose	Construction of 61 new housing units and 144 new student units
Locations	Bry-sur-Marne
Key dates	Commencement of work: October 2016
Total project cost	€ 14.0 million
Financing by the Region in the total amount of the project	15,9%
2017 financing by the green and sustainability bond	€ 1.4 million

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- ► PROJECT LIFECYCLE
- Construction of a 144-place student residence and a 61-unit social residence for a varied public, including young workers, single-parent families and lone people with very modest resources.
- Implementing a sustainable development approach with an energy label better than the legal minimum and using renewable energy.
- Implementation of social integration.
- Project management: SA of tiLM Novigère; Public co-financers: State, CDC.

• Forecast delivery: 30 March 2018.

► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	104 FTEs	A-3
Integration FTEs supported by the project	4 FTEs	В
Number of beneficiaries of the project	216	D-2



► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and eco-design	 Project carried out with Habitat & Environment certification (environmental management, clean site), with energy efficiency labels.
Combating climate change, and promoting the Region's environmental transition	 Energy performance higher than that set by applicable regulations (RT 2012 - 10%). Use of heat recovery of greywater for the production of domestic hot water.
Combating climate change, and promoting the Region's environmental transition	• The density of the project is consistent with the recommendations of the SDRIF (Master Plan of the IIe- de-France Region) aiming at promoting housing that is economical in land use with dense population
Socially inclusive development, combating inequality, and promoting the safety of individuals	 Creation of 205 social housing units at controlled rent and controlled charges for people qualifying for assistance. Diversity: the project includes a student residence and a social residence intended for a varied public (such as young workers, single-parent families, lone people with difficulties.). Management of the residence by an association responsible for personalised social support of the occupants. Promotes access to education for children from families of modest means.
Respect for fundamental rights	 Provides access to a home with dignity, whose rent corresponds to the tenant's resources.
Responsible regional development	 Responds to the need, identified in the context of the revised PLU Local Plan, to increase the supply of housing for young people, especially young workers Meets the objective of the departmental action plan for the housing of the most disadvantaged to create additional housing in social residences.
Regional economic development	 The project supports and creates employment in construction.
Fair practices, responsible purchasing and responsible supplier relations	 Transparent grant application process, based on the eligibility criteria clearly explained in a framework discussion accessible to all. Professional employment clauses in the VEFA contract (sale before completion contract).
Consultation with stakeholders	 Transparent grant application process, based on the eligibility criteria clearly explained in a framework discussion accessible to all. Implementation of professional employment clauses in the VEFA contract.

SOCIAL HOUSING AT CARRIERES-SOUS-POISSY

Example of project from the scheme Support for social housing

NEW PROJECT

Ð

titte

13 255

00

Ο

Purpose	Construction of 50 new social housing units
Locations	Carrières-sous-Poissy
Key dates	Amended building permit issued on November 2014; Project delivered end-2017
Total project cost	€ 9.2 million
Financing by the Region in the total amount of the project	4.3%
2017 financing by the green and sustainability bond	€ 0.3 million

• Implementation of an environmental certification and renewable en-

- QUALITATIVE PRESENTATION OF THE PROJECT
 Construction of 50 social rental housing units
- ► PROJECT LIFECYCLE
 - Program delivered on 20 December 2017
 - Tenants are scheduled to start moving as of 17 February 2018
- Project management: Ostia social housing company; Public cofunders: National Agency for Urban Renewal, CDC.

• Implementation of social integration.

► IMPACT INDICATORS

ergy initiative.

Indicator	Impact	Methodological note
Worksite FTEs supported by the project	58 FTEs	A-3
Integration FTEs supported by the project	2 FTEs	В
Number of beneficiaries of the project	117	D-7



► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

Environmental management and eco-design	 Project carried out with a Habitat & Environment certification (environmental management, clean site, etc.), with energy efficiency label.
Combating climate change, and promoting the Region's environmental transition	 Energy performance higher than that set by applicable regulations (BBC Effinergie label). Building connected to the ZAC biomass urban heating network whose environmental objective sets the share of renewable energy from 60% to 70% of energy needs.
Sustainable regional planning and improving quality of life	 The density of the project is consistent with the recommendations of the SDRIF (Master Plan of the lle-de-France Region) aiming at promoting housing that is economical in land use with dense population. Completed within the framework of the creation of a new "New centrality" district, opened on the Seine and a urban park of 10 ha, which aims to connect the two urban entities of the city and which is located in an eco-district.
Socially inclusive development, combating inequality, and promoting the safety of individuals	 Creation of 50 new social housing units with regulated rents and controlled charges for people who meet given low income requirements. Social diversity: the social housing units pertain to the intermediate, social and very social categories, and the project is part of a broader programme which also includes 71 housing units held for sale.
Respect for fundamental rights	 Provides access to a home with dignity, whose rent corresponds to the tenant's resources.
Responsible regional development	 Operation conducted within the framework of a ZAC located in an ecodistrict, listed as an operation of national interest, labelled (step 2) by the State, and the winner of the call for regional projects for the creation of econeighbourhoods. The project falls within the strategy of the national urban renewal programme.
Regional economic development	 The project helps support the creation of jobs related to the site.
Fair practices, responsible purchasing and responsible supplier relations	 Transparent grant application process, based on the eligibility criteria clearly explained in a framework discussion accessible to all. Professional employment clauses in the VEFA contract (sale before completion contrat).
Consultation with stakeholders	 The operation is conducted in the context of a ZAC whose creation was the object of a public inquiry. 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.



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 IIe-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 the IIe-de-France region.

In addition, the Region of Ile-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 lle-de-France a world reference in science and technology, and supporting worldclass universities and campuses in the region

• Region's jurisdiction: mandatory

• Forms 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 2017 by the green and sustainability bond :

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

Two schemes financed for \notin 41.8 million: "Support to major domains of research" and "Support to regional competitiveness clusters",

Support for social and solidary economics :

Several actions funded for an amount of ≤ 1.8 million under the "Social and solidarity economy" field; Example presented: Scheme to support the micro-credit activity of ADIE, association for the right to economic initiative (≤ 0.7 million).

SUPPORT TO THE REGIONAL COMPETITIVENESS CLUSTERS

Example of project to Support research and innovation

Purpose		Promoting the e	mergence of res	earch and developme	nt projects
Targeted economic players		Members of com	petitiveness clu	sters (SMEs, research	laboratories)
Total project cost		€ 18.6 million (e	expenditures of t	the year on the schem	e)
2017 financing by the green and s	sustainability bond	€ 18.6 million			
Timeline of project financing by p	revious green and sustainability b	onds			
	2014 С 6 М	2015 € 19.5 M	2016 € 15,8 M	2017 € 18.6 M	

▶ QUALITATIVE PRESENTATION OF THE PROJECT

Ile-de-France has 7 main clusters, 1901 law on associations: Advancity Paris Region (sustainable city and mobility); Astech Paris Region (aerospace); Cap Digital Paris Region (digital and uses); Finance Innovation (finance); Medicen Paris Region (healthcare innovation); Movéo (automobile and public transport); Systematic Paris Region (software and complex systems). In addition, four competitiveness clusters have expanded their area of activity into Ile-de-France: Elastopôle (rubber), Novalog (logistics), Vitagora (nutrition) and Cosmetic Valley (cosmetics).

- Regional scheme to support collaborative projects for RDI (research, development and innovation) brought forward by members of the llede-France competitiveness clusters (SMEs, research laboratories), to support the main activity of competitiveness clusters, which involves the emergence of public/private RDI collaborations and assisting its members in making these projects happen.
- The Ile-de-France clusters have between 230 members (Advancity, Medicen, Astech) and nearly 1,000 members (Systematic, Cap Digital).
- All projects financed by the Region must be labelled by at least one lle-de-France competitiveness cluster. For this, they must respond to a certain number of criteria, notably their involvement in certain strategic activities of the cluster. The regional scheme anticipates, among other things, to support projects which promote environmentally and socially sustainable approaches.
- A large share of research and development projects labelled by these clusters and more specifically by Advancity, Mov'éo, or Astech have the objective of bringing to market innovative services or products which are part of a sustainable development approach (sobriety of drivers)

in aerospace or vehicles, social and collaborative approaches in the digital realm, intelligent systems for software).

- These innovative projects aim to improve the quality of life, reduce inequalities, and propose new solutions to improve everyday life in a sustainable manner. In this, they address the priority themes set by agenda 21 of Ile-de-France: food and health (Medicen et Vitagora), energy and climate (Advancity, Mov'éo, Astech, Systematic), ecoconstruction (Advancity), biodiversity and water (Advancity), waste (Advancity), sustainable mobility (Mov'éo, Astech, Advancity, Cap Digital, Systematic).
- The solutions, services and products which will soon arrive on the market from these innovative projects will make lle-de-France into an important area for eco-innovations.
- The projects of the competitiveness poles are collaborative in nature. The main selection criterion is participation in at least one academic research laboratory and two businesses. Funding for these projects is shared between the Region, the State, and certain Departments and Communities. All partners are linked by a consortium agreement which identifies the role and commitments of each.

▶ PROJECT LIFECYCLE

- Examples of new projects funded in 2017
- \ll Faircity \gg : development of a high-resolution 3D simulation service on air quality.

« Eugene » : a solution to develop a suitable supervision system to exploit and reconfigure manufacturing production lines, a key vector for the factory of the future,

Impact INDICATORS Indicator Impact Methodological note Number of beneficiaries of the project 39 D-10

► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

The practice of determining eligibility is shown below for the example of the case of project from the Advancity and Medicen clusters :

Environmental management and ecodesign	 Funded projects deal themes based on the labelling of projects by the Advancity cluster : ECOVILLE or eco-organization of the city: a quality city which is resilient, dynamic, diverse and in internal and external harmony, ECOMOBILITY: an efficient driver for people to meet and for accessibility, ECOCONSTRUCTION: a well-structured and efficient framework, ECOTECHNOLOGIES: Knowledge of environments and ethical exploitation of resources. Advancity is leading the network of eco-activities of Ile-de-France.
Combating climate change, and promoting the Region's environmental transition	 As evidenced by the thematic priorities of the cluster, the projects emerging from the pole actually contribute to these commitments. The targeted applicable market are, for example: intelligent management of the city, new buildings and efficient islets, energy retrofits and renovation of old parks, or also monitoring of the quality of the urban environment.
Sustainable regional planning and improving quality of life	 One of the themes highlighted by Advancity is simple urban logistics, another is green transportation. With respect to the latter, projects of alternative transportation which are less polluting and collaborative are being developed.
Socially inclusive development, combating inequality, and promoting the safety of individuals	 The projects of the Advancity cluster are not the most pertinent for this criterion; we can cite the projects of Medicen (health) where the objective is to improve the quality of life and health of ill persons.
Respect for fundamental rights	• All the activities are conducted in the lle-de-France area. Therefore, they are governed by French law.
Responsible regional development	 The project supports high-level research and innovation, and thus participates directly in the development and dynamization of the region from a long-term perspective.
Regional economic development	 The funded projects are those of a "risky" nature where the feasibility and maturation to a final product or service is not assured. If successful, the project will contribute to the creation of start-ups (coming from public research laboratories involved) or very innovative products with high value added. These products will enhance the product portfolio of the businesses involved in the project which will generate revenues in success cases, open new markets. Scheme to support employment of researchers and engineers in the research phase.
Fair practices, responsible purchasing and responsible supplier relations	 The number of submissions is done via a call for projects with evaluation of the riles by experts from the clusters (signature of a code of ethics) then by sectoral experts from the State and Region. The selection of projects is based on criteria define by the cluster (Advancity is ISO 9001 certified), and the final selection is based on transparent criteria which can be will in the call for projects published on a dedicated website (competitivite.gouv.fr). No purchase is made by the Region and no relations with suppliers.
Consultation with stakeholders	 All projects are subject to signing of an agreement with the consortium between these partners. Only internal project stakeholders are involved.

SUPPORT TO SCIENTIFIC INVESTMENT (DOMAINES D'INTÉRÊT MAJEUR ET SESAME)

Example of project to Support research and innovation

Purpose	Support to areas 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	${f c}$ 23.2 million (expenditures of the year on the scheme)
2017 financing by the green and sustainability bond	€ 23.2 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 IIe-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, quality of life, health are issues that have been anchored for more than 20 years in the regional science policy and whose support was reaffirmed in 2017 with the labelling of DIM Respore, ELICIT, 1Health and Gene Therapy, as well as Emerging QI² DIMs and Longevity and aging. Added to this is the SESAME scheme, where ambitious projects have been selected in recent years, including the Pollurisk project in 2017.
- Other co-funders: higher education organizations, research laboratories.

▶ PROJECT LIFECYCLE

NEW PROJECT

- In order to promote research in the field of air pollution, the IIe-de France Region supported in 2017, the Pollurisk project for the creation of a multi-scale platform for the analysis of the health effects of air pollution and climate change at the University Paris Est Créteil.
- The Region has also participated in the financing of scientific equipment (characterization equipment for porous materials such as electron microscopy, diffractometre, ellipsometre, etc) through DIM Respore, whose main themes are renewable energies, environment sciences and safety and health / well-being.
- The DIM 1Health also invests in scientific equipment (incubators, cell sorters as well as computer servers for simulation). Its objectives are the development of new concepts, notably in vaccinology, antiinfectious therapy, diagnosis and the integration of a social and economic dimension in health.

84

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 ecodesign	 Environmental certifications of many public research laboratories justifying their good practices in particular in the handling of hazardous products. Consideration for the environmental impact in the construction of projects by raising awareness upstream among scientific staff.
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	 Networking of research institutions, especially by pooling scientific equipment so that smaller organizations can benefit from the expertise of larger companies. The goal of any public research initiative is to have as many people as possible benefit from technological progress.
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	 Co-funding of scientific equipment, participation in the economic development of the territory via the co-funding of scientific equipment. Creation of jobs for the maintenance of equipment or the completion of projects. Creation of many innovative start-ups through scientific research.
Fair practices, responsible purchasing and responsible supplier relations	 Choice of projects via calls for projects. Decision-making by scientific experts recognized internationally in their field. Selection criteria defined beforehand and known to all.
Consultation with stakeholders	 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.

SUPPORT TO MICRO-CREDIT ACTIVITIES

Example of project to Support social and solidary economics



Purpose		Sp	ecial loans and regi	onal premiums couple	ed to the ADIE micro-credi
Targeted economic players		Pu	Public very distant from employment		
Total project cost		C	0.7 million (expend	itures of the year on t	he scheme)
2017 financing by the green and sustainability bond		C	0.7 million		
	2014 C 1M	2015 € 1.4 M	2016 € 1.1 M	2017 € 0,7 M	

▶ QUALITATIVE PRESENTATION OF THE PROJECT

- Support to the micro-credit activity of ADIE 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.
- The lle de France Region 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 will be one of the selected operators who will offer this unique coordinated path of support. Through ADIE, 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.
- Accompaniment of more than 1,800 business creators each year, with a 75.5% survival rate of new businesses 2 years after creation.
- Long-term accompaniment for supported entrepreneurs: individualised support, meetings with experts, micro-insurance, offers of special deals, ADIE creators' directory, a space for microentrepreneurs, e-learning videos and online practical guides.
- In addition to co-financing partners (departmental councils in particular, private actors) the ADIE functions in conjunction with other actors in accompaniment or financing of business creation along with

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

- ADIE's activity increased significantly with a growth of more than10 % a year for the last three years..
- ADIE's work focused on young people, with the inclusion of 330 young people in a CréaJeunes group to set up their business, and, for women project owners (1,031 women supported, which represents 56 % of the public), stronger partnerships with professional networks.
- The association has also strongly developed its presence in the region's priority areas through the roll-out of the campaign "create your business near home": more than 592 collective information and workshops in different districts of Ile-de-France. These events enabled them to work with the essential business start-up partners and to inform and raise awareness among the inhabitants of priority neighbourhoods of starting a business.

▶ IMPACT INDICATORS

Indicator	Impact	Methodological note
Number of beneficiaries of the project	1,848	D-9

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

Environmental management and ecodesign	 Scheme that does not include an environmental approach.
Combating climate change, and promoting the Region's environmental transition	 Scheme that does not include an environmental approach.
Sustainable regional planning and improving quality of life	 113 regional grants attributed in 2017 to beneficiaries of ADIE microcredits of which 32% were creators residing in the social priority area districts of the region. In addition to the micro-loan and / or regional grant, the entrepreneur can benefit from an additional 0% interest honour loan. Out of the 2,044 micro-loans, 1,193 people benefited from a 0% interest loan and / or a regional grant (113 regional grants). These 3 financing tools reduce the total cost of credit supported by the project leader. 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	 1,848 businesses created (and as many jobs created), of which 71% by beneficiaries of the social minimum income, 56 % by women, 19 % by people above 51 years old, and 21 % by less than 30 years old. Sustainable economic integration: 84% of creators have a professional activity and 65.5% still direct their businesses after 3 years. 42% are no longer eligible for social minimum income.
Respect for fundamental rights	 Right to entrepreneurial initiative for all, equality of opportunity. Combating social and regional inequalities. Fight against exclusion from banking services. Fight against discrimination (equality between males/females, origins, skills: 5% of beneficiaries are illiterate, 15% just know how to read/write/do basic calculations).
Responsible regional development	 32% of beneficiaries are from the social priority area districts of the region, of which 29% from the Seine-Saint-Denis department. 6% are homeless. 62% reside in an urban zone (reflecting the concentration of activities in lle-de-France)
Regional economic development	 Each creator financed by ADIE created an average of 1.2 jobs, for about 2,217 total jobs created in 2017 (and as many job seekers). The survival rate of businesses is 75.5% after 2 years, comparable to the national average.
Fair practices, responsible purchasing and responsible supplier relations	 A credit committee meets each week in each department. Credit decisions are given on an as-you-go basis and guarantee fair treatment to applicants. All the counsellors are trained in the fight against discrimination (gender, geographic origins).
Consultation with stakeholders	 An annual steering committee gathers all the partners and sponsors.

http://www.adie.org/creadie-le-prix-du-microcredit-de-l-Adie



APPENDICES

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 2017 expenditures which took place for each of the schemes (cf. b below for the methodology).

b) 2017 financing by the green and sustainability bond

The amount shows corresponds with total 2017 expenditures related to the corresponding project/scheme. The two exceptions, an amount less than total 2017 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. \leq 14.6 million out of a total of \leq 58.2 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 the IIe-de-France Region.

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 thirteen out of seventeen goals. Indeed, Goals 2, 5, 16 and 17 ("Zero Hunger", "Gender Equality", "Peace, Justice and Strong Institutions" and "Partnerships for the Goals" respectively) focus more on the social responsibility of the Region as an institution, rather than on the characteristics of the investment projects financed under the green and sustainability bond issue;
- On the other hand, several sustainable development goals apply consistently to all projects eligible for green and sustainability borrowing, given the grid of project eligibility criteria that has been established by the Region. Thus, each eligible project contributes to the reduction of inequalities and thus to the fight against poverty (Goals 1 and 10), economic growth (Goal 8), responsible production (Goal 12), sustainable development of cities and communities (Goal 11), and the fight against climate change (Goal 13, with the exception of ADIE's support mechanism for micro-credit activity).
- The contribution of each project to the remaining goals is assessed on a case by case basis, according to the specificity of each project as described in the factsheets that accompany this report..
- With regard to Goal 3 "Good health and well-being", the United Nations' scope mainly concerns the field of public health. This definition was followed to assess 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 were therefore not taken into account. Only three investment projects respond directly to public health problems within the meaning of Goal 3, the Region intervening in this field essentially through its operation by managing health and social facilities.

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% (BTO1 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 € 1 million for works for new construction; 14.2 FTE for € 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 cost (€ 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'Équipement 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 (FTE) 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. The lle-de-France Region 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 lle-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 € 45 k (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 Ile-de-France Mobilités).
- D-5 : Estimation of usage by model of traffic forecasting model (Transport Union of IIe-de-France (IIe-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 IIe-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 lle-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 benefiaed from a credit allocation in 2017.
- D-11 : Capacity in cumulated totals.
- D-12 : Number of users of the P line (Paris-Provins via Longueville section) and TER Grand-Est.
- **D-13** : Measure of actual attendance, adjusted for growth forecasts on employment and population.

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: Estimation based on the impact of the replacement of the fuel heating by a gas boiler

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 in the second second



the discount rate

I the envisaged project cost

R 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 under- stood 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	 Process for environmental certifications (BEPOS, HQE, ISO, etc.) Accounting for environmental impacts in the management of the construction site (e.g.: charters, low nuisance sites, green sites, etc.) Integration of environmental concerns in the specifications Recourse to support for the contracting authority devoted to environmental management of the project Explanation of accounting for environmental aspects within the scheme relating to the project 	

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 Develop- ment and Innovation Strategy ».	
Additional definition	The project promotes the ecologically-friendly transition of the region by enabling, for example, a reduction in CO ₂ 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	 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) Use of renewable energies Recovery of rainwater and/or grey water Project design respectful of neighbouring biodiversity 	

Sustainable regional planning and improving quality of life		
Vigeo 2016 definition	« 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 ».	
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	 Integration of the project in the region (planting greenery, presence of green spaces, integration of the building into the urban fabric, etc.) 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) Accessibility of a population to a new service Opening a service to a new population (which did not previously have access) 	

93

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 relat- ing 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	 Equipment planned to promote accessibility and/or security Integration of the project in the renovation/opening up of a district Health benefits of the project for the persons concerned Taking into account of social criteria (different rates, fight against exclusion, etc) Definition of a pedagogical program working towards better social integration 	

Respect for fundamental rights		
Vigeo 2016 definition	(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	 Security and health of persons, workers on construction sites Right to come and go Right to education 	

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 longterm perspective, responding to a need, or anticipating the creation of new needs, or accompanying the urban development of a sector.		
Possible illustrations	 Needs in terms of transportation, employment, the supply of tourism, green spaces, etc. Integration into a development zone Innovative projects participating in the dynamization of the territory Projects directly supporting economic activity in disadvantaged areas 		

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 compe- tition, respect for labour laws, and equal treatment, etc.). Environmental and social factors are included in the purchase of products and services relating to the pro- ject. 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	 Application of the Public Procurement Code, transparency of the investigation process in the context of subsidies Elements of the "Responsible public procurement" of the Region applicable to the project Choice of materials which are respectful of the environment, hours of social integration 		

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 organisa-tions, 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	 Dialogue and consultation with the stakeholders Description of public surveys Description of the consultation of the process of evaluating subsidies and/or financial sheets on the project 		

95

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 consumtion. Its primary energy consumption must be less than the amount of renewable energy it produces via its equipment.

CERTIFICATION PATRIMOINE HABITAT

Values a rehabilitation program commiaed to by a contracting authority by sebng 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.

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.

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.

DUP

Statement of public interest (Déclaration d'Utilité Publique)

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 BBi set by the 2012 RT The requirement in terms of air permeability are also higher than the BBC label.

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.

"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 IIe-de-France, a coefficient of 1.3 must be applied to this objective.

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 lle-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.

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.

MODAL SHIFT

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

TCSP

Public transport on own site.

ZAC

Concerted development zone.

Crédits photographiques

Couverture : © Philippe AYRAUT / Région Île-de-France, ADAGP 2017 P2 : Élodie Grégoire ; P 16 & 17 : Takuji Shimmura ; P 18 : © l'image contemporaine ; P 20 : Région Île-de-France ; P 22 ; Région Île-de-France ; P 24 : Lycée de Vinci © RIF ; P 26 : Région Île-de-France ; P 28 : Cécile Septet / ANMA ; P 32 : Région Île-de-France ; P 34 : © Joanna Tarlet-Gauteur / Picturetank ; P36 & 37 : Pierre-Yves Brunaud ; P 38 : Île-de-France Mobilités; P 40 : Pierre-Yves Brunaud / Picturetank ; P 42 : Christophe RECOURA - STIF ; P 44 : Christophe RECOURA - STIF ; P 52 : Christophe RECOURA - STIF; P 56 : Jean-Lionel Dias / Picturetank ; P 58 : Cyrus Cornut / Picturetank ; P 60 & 61 : Pierre-Yves BrunaudÓ/ Picturetank ; P 62 : Région Île-de-France ; P 64 & 65 : Frédéric Ménissier / PWP ; P 66 & 68 : AEV ; P 70 & 71 : © Agnès Dherbeys / M.Y.O.P ; P 72 : Région Île-de-France ; P 74-75 : Cyrus Cornut / Picturetank ; P 76 : Capelli Promotion ; P 78 : SA d'HLM Éfidis ; P 80 & 81 : Jean-Lionel Dias / Picturetank



Direction des Finances direction.finances@iledefrance.fr MINPRIM'VERT



Région Île-de-France 2, rue Simone Veil 93400 Saint-Ouen

www.iledefrance.fr



9 @iledefrance

@iledefrance