PROJECTS FINANCED BY THE GREEN AND SUSTAINABILITY BOND

2024

€800M

ISIN : FR001400FG43

Région îledeFrance

EDITO

Valérie Pécresse,
President of
the Île-de-France Region

The Île-de-France Region has been committed to combating climate change since 2016. Environmental and social challenges are front and centre of our local authority's policies and regional action.

As early as 2012, the Île-de-France Region was the first local authority in Europe to issue a green and sustainability-linked bond. Since then, the Region has demonstrated that sustainable finance is a priority for our community, committing to exclusively using green and sustainable financing from 2019. Green and sustainability-linked regional debt is rising steadily, and has now reached the 92% mark. The Île-de-France Region and its staff are keen to take into account all the concerns of people across the region and the challenges they face.

This allocation and impact report on sustainable financing 2024 sets out the Île-de-France Region's commitments. In 2024, the Region pursued its strategy to have exclusively green and sustainable financing, a policy initiated in 2019. The Region is thus consolidating its position as a European leader in sustainable financing, with the completion in 2024 of a sustainability bond issued for the amount of €800 million. By the end of 2024, 92% of the Region's total outstanding debt was green and sustainable, and we should achieve 100% within three years.

The green, social and sustainable bonds framework established in March 2021, which governs this allocation and impact report, incorporates the UN Sustainable Development Goals (SDGs) as well as some of the most ambitious Environmental, Social and Governance (ESG) criteria. It is based on the most rigorous benchmarks on the market, such as the European taxonomy with complementary alignment for investments in low-carbon transport.

Once again this year, the care taken in choosing projects allows us to present achievements combining environmental, social and economic challenges. The example of the construction of Cable A, the first cable car line in Île-de-France connecting Créteil and Villeneuve-Saint-Georges, is a perfect illustration of this. Indeed, the project helps to reduce CO_2 emissions by providing an effective and attractive low-carbon alternative to support the local economy by improving accessibility in the municipalities it passes through as well as an adapted time table and greater frequency, to best meet the challenges and geographical situation of the Region. The completeness of the projects presented in this impact report is a guiding principle for the region.

This new allocation and impact report details the regional eligibility criteria for each selected project in order to illustrate their environmental and social dimension. This thus contributes to the Region's desire to maintain transparent communication about all its investments.

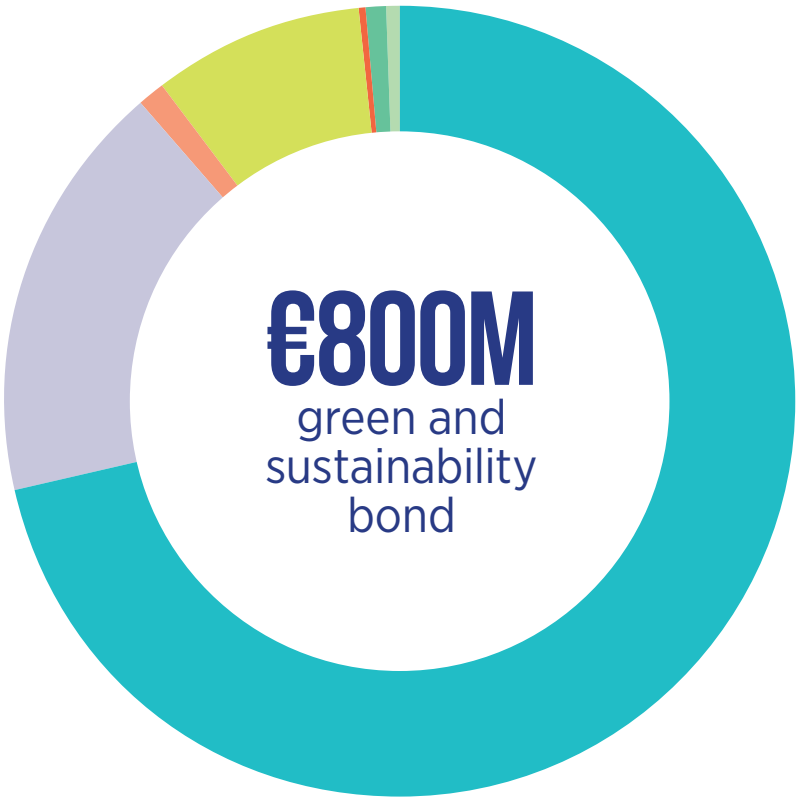
It should be noted that the Region's commitments to green and sustainable financing were again awarded prizes in 2023 and 2024. These prizes awarded to the Region's teams highlight the effectiveness and quality of the Region's sustainable finance policy:

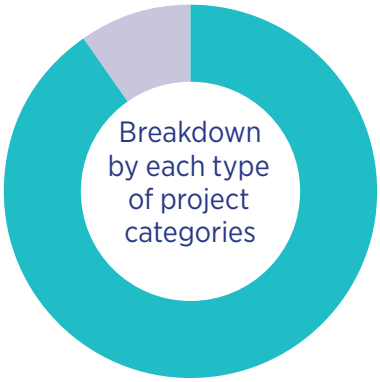
- *"Best (Global) Green Bond Insight Leadership Team"*
  award presented by *Capital Finance International* in April 2024;
- Award for *"Best Green Bond Thinking Team"*
  presented by *Capital Finance International* in February 2025.
- *"Best in Class Bond Issuer (Global)"*
  Award from *Capital Finance International* in April 2024 and February 2025

The constant support of many investors since the first sustainable bond issued in the Île-de-France Region demonstrates the importance of a strong public commitment in environmental and social matters. Once again, I would like to thank them for their trust and commitment to our local authority, which continues to pursue its strategy to promote the ecological and energy transition.

SUMMARY

PROJECT FINANCED BY THE 2024 GREEN AND SUSTAINABLE BOND





90.3%
green project categories

9.7%
social project categories

€575.5M
clean transportation
71.9%

€36.4M
green buildings
17.1%

€10.1M
renewable energies
1.3%

€69.4M
access to essential services: education
8.7%

€0.7M
affordable housing
0.1%

€6.3M
support for employment
0.8%

€1.6M
affordable basic infrastructures
0.2%

PROJECTS FINANCED BY THE 2024 ISSUANCE

	ALLOCATION RATE 2024	% ALIGNMENT TO THE 1ST OBJECTIVE EUROPEAN TAXONOMY	AMOUNT (€M)	
	100.0%	89.0%	800.0	
Green projects categories	**90.3%**	**89.0%**	**722.1**	
Green buildings	**17.1%**		**136.4**	**p. 24**
New secondary school and boarding school construction projects	**0.3%**		**2.7**	
New high school in Vincennes (94)			2.7	*
Secondary school renovation project	**12.6%**		**100.4**	
Henri Becquerel high school in Nangis (91)			4.1	p. 26
Albert Camus high school in Bois-Colombes (92)			6.4	*
Urugay France high school in Avon (77)			12.1	p. 28
Eugène Ronceray high school in Bezons (95)			7.1	p. 36
Jules Ferry high school in Versailles (78)			5.0	*
Pierre de Coubertin high school in Meaux (77)			9.3	p. 32
Evariste Galois high school in Satrouville (78)			10.5	p. 34
Paul Valéry Regional School Campus in Paris (75)			28.2	p. 30
Jean Moulin high school in Torcy (77)			10.0	*
Gustave Monod high school in Enghien-les-Bains (95)			3.6	*
Adolphe Chérioux high school in Vitry-sur-Seine (94)			4.2	*
High education construction project	**4.2%**		**33.3**	
Illustration Building in Bobigny (93)			7.9	p. 40
Bréguet Building in Gif-sur-Yvette (91)			5.6	p. 42
Biomedical research Building in Créteil (93)			8.3	*
Condorcet Campus in Paris (75)			8.7	p. 38
Mathstic Building in Villetaneuse (93)			2.8	*
Clean transportation	**71.9%**	**90.3%**	**575.5**	**p. 44**
Projects: subways	**3.0%**	**3.0%**	**23.8**	
Subway line 11			22.7	p. 46
Subway line 14			1.1	*
Projects: tramways	**12.0%**	**12.0%**	**95.8**	
Tramway line 1			42.7	p. 48
Tramway line 10			14.2	*
Tramway line 12			30.7	p. 50
Tramway line 13 Express			8.1	*
Projects: railway links	**41.1%**	**41.1%**	**328.9**	
EOLE			328.9	p. 52
Projects: Development for bus on own site and layount of roadways	**15.9%**	**15.9%**	**127.1**	
Cable 1			9.6	p. 56
Cycling networks in île-de-France			22.6	*
Nexteo RER B and D			61.7	*
TZEN 5			8.8	*
TZEN 4			24.3	p. 54
Renewable energies	**1.3%**		**10.1**	**p. 58**
Renewable Heat call for projects - UniGéo in Pantin (93)			3.8	p. 60
Renewable Heat call for projects - SMIREC in Epinay-sur-Seine (93)			1.4	p. 62
SAS H2 in Créteil (77)			0.9	*
Drilling of a geothermal doublet in Aubervilliers (93)			1.0	*
Géomarne geothermal network in Champs-sur-Marne (77)			1.1	p. 64
Heat network in Rueil-Malmaison (78)			1.1	*
Extension of the geothermal network in Villeneuve-Saint-Georges (94)			1.0	*
Social project categories	**9.7%**	**9.7%**	**77.9**	
Access to essential services: education	**8.7%**	**8.7%**	**69.4**	**p. 66**
Digital educational materials and resources			62.5	p. 68
Nadar high school in Draveil (91)			3.2	*
Nicolas-Joseph Cugnot high school in Neuilly-sur-Marne (93)			3.7	*
Support for employment	**0.8%**	**0.8%**	**6.3**	**p. 74**
Energy Efficiency Vouchers			6.3	p. 76
Affordable housing	**0.1%**	**0.1%**	**0.7**	**p. 78**
PLUS and PLS housing residence in Montreuil (93)			0.7	p. 80
Affordable basic infrastructures	**0.2%**	**0.2%**	**1.6**	**p. 70**
CREPS Île-de-France			1.6	p. 72

* Factsheets available online on the Region's website.

PRESENTATION OF THE ÎLE-DE-FRANCE REGION

As a leading regional authority, the Île-de-France Region manages a budget of over €6 billion, the highest among the French regions, half of which is dedicated to long-term investment to promote the vitality and attractiveness of the region.

The Region therefore plays a pivotal role in sustainable development. It is the competent authority for defining strategic guidelines for local public action in the region: regional development, transport (with Île-de-France Mobilités), economic development, research and innovation, climate and energy, biodiversity and waste management. Over the period 2020-2024, the Region is spending almost €10 billion on the environment as part of its plan to mobilise for ecological transformation. As the spearhead of the foundation of a sustainable regional ecosystem, capital expenditure is a priority.

AN AMBITIOUS ENVIRONMENTAL ROAD MAP

As part of its actions, the Region has established a cross-cutting environmental roadmap that is resolutely geared towards the regions and permeates all regional policies:

- Adoption in September 2024 of a new **Île-de-France - Environmental Region Master Plan (the SDRIF becomes SDRIF-E)** "2040 objectives", which will be submitted to the Regional Council for vote in 2024 July. This strategic document with a regulatory scope directly influences the development of the region (to control urban and demographic growth), housing, mobility and the environment. It is largely based on sovereignty and sustainability objectives, focusing on adopting a trajectory of sovereignty, creating and sanctifying natural spaces and limiting soil artificialisation;

- **Regional Climate Change Adaptation Plan**, launched in 2022. The plan, estimated to cost €1 billion, is based on a three-pronged strategy: “Protect Île-de-France residents, especially the most fragile”; “Protect ecosystems”; “Protect the economic fabric of France”. It aims to address all the consequences of climate change;

- Establishment of the **Île-de-France regional CERM**, the Group for studies on climate change and its environmental impacts. The role of this working group is to scientifically explain ongoing climate change in Île-de-France, anticipate future climate changes and help the Region to derive the consequences thereof. The Île-de-France Region is committed to implementing an environmental impact assessment of regional expenditure, also known as the “Green Budget”, in view of the six climate and environmental issues arising from the European Taxonomy. An initial presentation of this assessment was made during the vote on the 2024 initial budget, in 2023 December;

- Environmental objective of **reducing greenhouse gas emissions** linked **to transport and mobility.** In March 2024, the Region voted for its draft Île-de-France Mobility Plan, which aims to meet the travel needs of Île-de-France residents by 2030 and put mobility in the region on the road to "zero carbon". This plan sets out the principles governing the organisation of the mobility of people and the transport of goods, traffic and parking for the period 2020-2030. It succeeds the Île-de-France Urban Travel Plan (PDUIF) 2010-2020;

- New **regional economic development strategy "Impact 2028"** for 2022-2028, which integrates the environmental issue (axis 4) among its major challenges as part of its objective to support the French economy in terms of business, employment and innovation;

- Repositioning support for the **themed research networks** (major interest areas), mainly by targeting the major challenges in terms of climate, energy and resources. The “Responsible Digital and Artificial Intelligence Strategy” was adopted in March 2025 to limit the harmful effects of cyberbullying and carbon impact;

- **High environmental standards,** with the adoption of various plans, strategies, schemes and mechanisms over the last four years, such as the "New Air for Paris Region" plan, the regional waste prevention and management plan, the "Energy-Climate" plan, which focuses on innovation and the development of renewable energies, and the "Solar", "Hydrogen" and "Methane" plans, as well as the "Green" plan (and the implementation of the 192 proposals put forward at the first Paris Region COP), the "Anti-traffic jams" and "Cycling" plans, and the development, in consultation with local stakeholders, of the Regional Biodiversity Strategy 2020-2030;

- **Support for organic farming** in the Île-de-France region and short distribution channels, with the adoption in 2017 of the "Regional strategy for forestry and wood", the "Regional strategy for the development of bio-sourced materials and products" in 2018 and the "Regional plan for local, sustainable and inclusive nutrition" in 2021.

In addition, regardless of the area of intervention, the Region makes sure that all its guidelines are coherent and that sustainable development and social responsibility are central to its action. Thus, the Region aims to be an exemplary authority in terms of the institution's operation.

SEVERAL EXEMPLARY ACTIONS UNDERTAKEN BY THE REGION

- The Region affirms its commitment **to fighting discrimination and promoting equal access to rights for all**, by designating disability as the Regional Great Cause for the year 2024. With a regional budget of 124 million euros, disability is at the core of regional policy. A comprehensive policy is thus being implemented to take action on all fronts: transport, culture, health, care services, family support, and also changing mindsets. In 2017, the Region updated the multi-year investment plan with the aim of scaling up investment from 2 to 5 billion euros by 2027. All **high school renovation projects systemiccally incorporate acessibility improvements for the facilities concerned**. Furthermore, all newly delivered programs are designated to meet the highest standards of accessibility, ensuring inclusive infrastructures for all users.

  As part of its **active policy to promote gender equality and combat violence against women** (designated a Major Regional Cause in 2017), the Region has also signed a framework agreement on gender equality in the workplace with five trade unions. It should also be noted that the Region has put in place a second action plan on "equality in employment between women and men" for the 2024/2026 period. In March 2019, the Region also adopted a framework agreement to improve public service efficiency through the quality of life at work, autonomy and responsibility. By continuing to modernise, the Region has committed through several schemes to encourage freedom in the organisation of work (working from home, flexible working hours), whilst remaining anxious to protect its staff and by becoming a pioneering administration in recognising the right to disconnect.

- Beyond that, to make public procurement contracts more sustainable and accessible, the Region wanted to overhaul its purchasing policy as early as 2016, having taken part in creating the Maximilien platform assembling all Île-de-France public procurement contracts. In 2018, the Region had already signed a "Responsible Purchasing and Supplier Relationships" charter as part of a drive to improve relations with its suppliers, particularly companies in the social economy.

A COMMITMENT CONFIRMED BY EXTERNAL ASSESSMENT

The Region enjoys excelled credit quality, equivalent to the French State, which enables it ot invest in its area under the best possible conditions over the long term. It is currently rated Aa3, with negative outlook, by Moody's and AA-, stable outlook, by Fitch.

The extra-financial environmental, social and governance (ESG) performance of the Île-de-France Region is also recognised. In 2021, the Vigeo Eiris agency, which has been assessing the Region since 2009, scored the Region's performances as 63/100 overall, which are qualified as "advanced". The agency is thus acknowledging the sustainable performance of the Île-de-France Region by placing it third out of the 29 European local authorities assessed.

A REGULAR PLAYER IN THE GREEN AND SUSTAINABLE BLOND MARKET

The Île-de-France Region is a frequent and regular issuer in the green bond market. It raised more than €6.4 billion with its green and sustainable issues between 2012 and 2024, through 12 financing transactions. Green and sustainable financing accounts for 92% of the total outstanding debt at the end of 2024.

The green and sustainable transactions launched by the Region are consistent with the Sustainability Bond Guidelines and thus governed by both the Green Bond Principles and the Social Bond Principles. They aim to implement best practices, for example through the use of a third-party opinion on the 2015 reporting, or by requesting an update of the second opinion on the Region's commitments in the context of its activities in 2021. The framework established by the Region on the green and sustainable issues is described on the next page.

Recent awards

The Île-de-France Region has been awarded several prizes in recent years for its green and sustainable financial strategy, in particular:

- **Best Global Green Bond Leadership Team Awarded to the Île-de-France Region by *Capital Finance International* in 2024 and 2025**
- **Award for "Best-in-Class Global Bond Issuer"**

  In February 2025, Capital Finance International (CFI) awarded the Île-de-France Region the prize for the "world best global issuer of its category" in connection with the €1,000 million bond issue in 2025. This awards the Region's pioneering commitment to environmentally friendly and socially responsible investment practices.
- **"Business partner" Award**

  The award was presented to the region in April 2022 at the Digital Finance Awards, highlighting the work carried out by the Finance division with the region's operational departments to steer regional finances towards ever more responsible financing and to consider emerging international regulations in this area (Sustainable Development Goals, European taxonomy, ICMA, etc.).

©Région Île-de-France

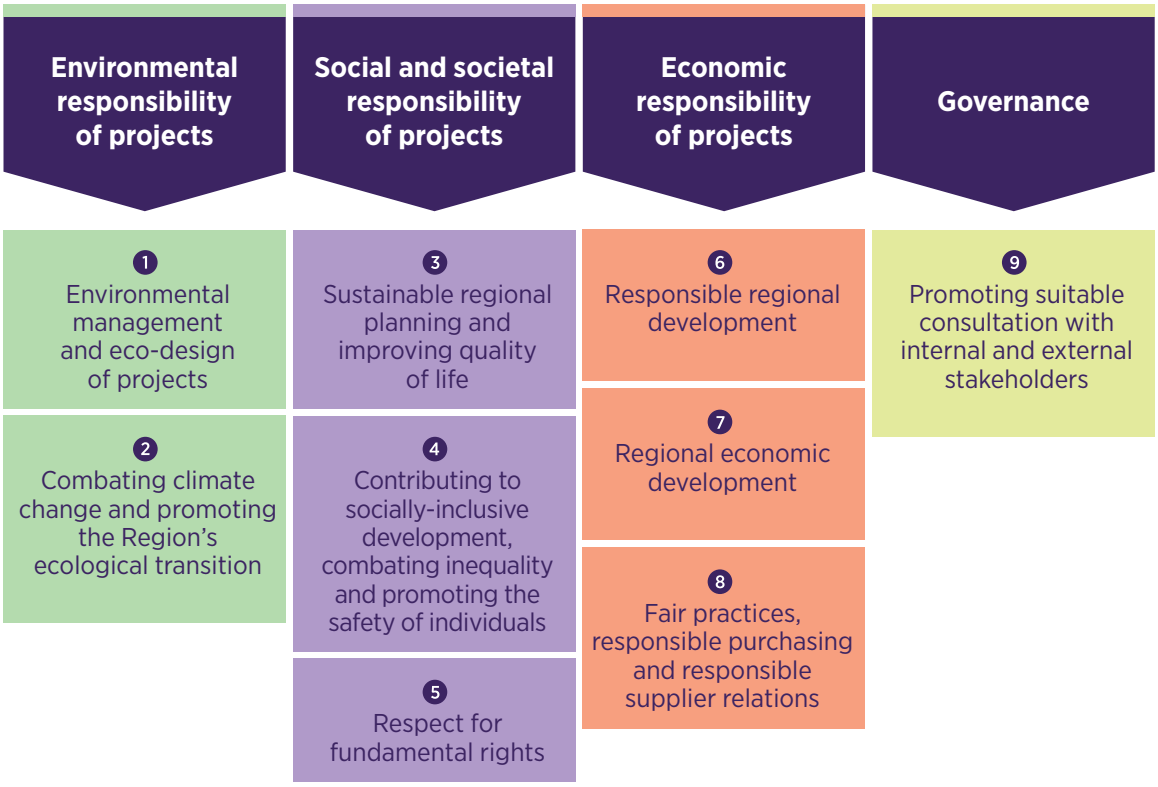
THE REGION'S GREEN & SUSTAINABILITY FRAMEWORK

The green and sustainable operations launched by the Île-de-France Region comply with the major Green Bond Principles and Social Bond Principles; they aim to implement the best practices in place.

Allocation of funds to four categories of green projects and six categories of social projects emblematic of regional action

GREEN PROJECT CATEGORIES	
Sustainable buildings	Construction and renovation of buildings using a sustainable development approach, contributing to protection of the environment.
Low-carbon transport	Construction of public rail transport infrastructures and low-carbon road transport infrastructures dedicated to public passenger transport.
Renewable energy	Projects that contribute to the development of renewable energy and energy efficiency.
Terrestrial and aquatic biodiversity conservation	Restoration and rehabilitation of ecosystems, sustainable forest management, investment in protected areas.
SOCIAL PROJECT CATEGORIES	
Access to essential services: education	Provide access to quality education infrastructures (public secondary education, public higher education).
Access to essential services: health	Projects that contribute to the development of health infrastructures and the purchase of healthcare equipment, research and development projects in terms of health and projects related to the setting up of any emergency infrastructures required in an exceptional crisis.
Access to essential services: social inclusion	Development of accommodation capacity for vulnerable populations, of medical educational centres, projects to improve the accessibility of buildings and infrastructures.
Affordable housing	Projects designed to develop and renovate the social housing stock, in line with environmental and social requirements and increasing access to housing and improving comfort.
Affordable basic infrastructure (transport, energy, green spaces and sporting facilities)	Construction of public transport infrastructures for better access to the entire region, projects to improve the comfort and safety of infrastructures for transport users and residents, development of basic infrastructure in terms of local renewable energy and energy efficiency; in terms of green spaces, preservation of the natural environments and biodiversity, development of sporting facilities.
Support for job creation, prevention and fight against unemployment related to crises (including by financing measures for SMEs and micro-companies (MIC)	Projects that contribute to creating or maintaining local jobs, through supporting regional SME & MIC, and projects in the social and socially-inclusive economy, support for research and innovation by SME & MIC and the development of the region's attractiveness.

NINE ELIGIBILITY CRITERIA ON THE PURPOSE AND MANAGEMENT OF PROJECTS



In some cases, especially for projects for emergency measures in a crisis, not all the eligibility criteria may be fully covered.

Publication of a report on the use of funds (by the end of year n+1)

Reports published by the Region illustrate compliance with commitments made at the time of issue relating to the allocation of funds, compliance with the eligibility criteria for each project/scheme financed and presentation of cross-cutting impact indicators for projects. Schemes involving a multitude of small projects are reported on one or two project examples which are presented for each scheme funded.

Transparency on management of funds and the allocation and selection process

1. Management of funds

In terms of financial flows, the funds from the borrowing are fungible in the regional treasury. French authorities are obliged to deposit their cash balance in a single account at the French Treasury.
From a budgetary and accounting viewpoint, borrowings are entered as investment earnings and cover the investment expenses for the year. This principle of budgetary annuality guarantees investors that the funds raised by the green and sustainable loans will be used in the year the loan is raised to finance the Region's investment projects. The Regional Department of Public Finances (DRFiP) controls the regularity of the expenditure mandated by the Region and makes the payment. In his capacity as the designated public accountant for the Île-de-France Region, the Regional Director of Public Finances for the Île-de-France Region and Paris certifies that the expenses listed on the statement produced have been paid.

2. Project allocation and selection process

This process starts after the end of the year in which the loan in question was raised, when the Region has a perfect view of the level of investment expenditure for each project.
The Finance Division, which coordinates the preparation of the report, requires each operational division in the Region to select a certain number of investment projects:

- Firstly, the operational divisions must identify projects corresponding to an amount of expenses recorded in the year and which meet the eligibility criteria for green and sustainability loans from the most exemplary in this respect. In some cases, especially for projects for emergency measures in a crisis, some eligibility criteria may not be fully covered. The Region's divisions that sponsor the projects are the best placed to select the most illustrative projects in their portfolio.
- The information obtained by each division is then centralised within the finance division, which consolidates the document and verifies the overall consistency..
- Secondly, the management control and financial decision department verifies the amount of expenses for each project in conjunction with the division in question. The finance division then distributes the funds raised by the loan on the basis of the proposed projects, the sustainable finance committee (SFC) approves the final selection.

The document is then sent to the communications division for modelling and printing, before being published on the Region's finance portal.

The document is then sent to the communications division for modelling and printing, before being published on the Region's finance portal.

INTRODUCTORY ASPECTS OF THE 2024 REPORT

Like the 2024 report, this document includes:

- A table summarising the allocation of funds to the projects/schemes submitted;
- A map showing the geographical distribution of projects in the Region;
- A table summarising the three potentially cross-cutting project impact indicators identified: jobs supported by the project (in the construction and operation phases), CO2 emissions avoided by the project and the number of project beneficiaries, by including a methodological note presenting each methodology used to calculate the impact indicators;
- A fact sheet on each project/scheme presented, describing the purpose of the project and updating the life of the project if necessary; a table showing the compatibility of the project with the Region's objectives; a summary table illustrating with evidence how each project meets each eligibility criterion; each fact sheet header giving essential information on the project and, where applicable, the amounts allocated to the project from previous green and responsible loans made by the Region since 2014;
- Because of technical constraints, this year not all project fact sheets could be integrated to the reporting. Nevertheless, all the projects appear on the overview tables. In order to limit the reporting to 100 pages, the Region has proceeded to a selection of project factsheets included in this year reporting. The other project factsheets are available online on the Finance webpage.
- An evaluation, where possible, of the project's alignment with the first objective (Mitigating climate change) of the European green taxonomy.

- A review of green and responsible borrowing projects financed in 2024 from the perspective of the United Nations Sustainable Development Goals:
    - → The targets of the Sustainable Development Goals to which each project responds are identified as such in the header of each project sheet;
    - → A summary table is presented to provide an overview of the contribution of each project to each of the goals; the approach used to construct this table is presented in the methodological note. The table also links to the impact indicators referred to in the project sheets;
    - → This approach shows that, on average, each project makes a direct positive contribution to eight of the United Nations' sustainable development objectives, compared with a subset of eleven sustainable development objectives that could potentially apply directly to regional investment projects financed by green and responsible borrowing in2024[1].

2024 REPORT PREPARATION PROCESS	
February 22nd, 2025	• Launch of the allocation and project selection process at the Sustainable Finance Committee.
March-May 2025	• Verification of the amount of expenses on each project by the management control and financial decision department.
May-June 2025	• Each division involved prepares the report on the projects identified, illustrating how each project and scheme meets the eligibility criteria and filing in an impact indicator grid, mainly focusing on the methodology used.
June 2025	• First provisional project selection by the finance division Consolidation, standardisation an dconsistency check by the finance division of all information produced.
June 25th 2025	• Sustainable Finance Committee (SFC) meeting definitively selecting the projects.
July-August 2025	• Formatting and translation of the report.
Before the end of 2025	• Publication of the finalised report.

52%
Proportion of projects and schemes renewed this year compared to last year

42
Projects and schemes benefiting from funds raised in 2024

22
New projects and schemes benefiting from funds raised in 2024

8
Average number of UN Sustainable Development Goals to which each financed project or scheme directly contributes

1. See methodological note.

EVALUATION OF THE CONSTITENCY OF PROJECTS WITH THE EUROPEAN TAXONOMY

All the projects were **selected in accordance with the regional eligibility criteria** set out in the Île-de-France Region's Green, Social and Sustainable Emissions Framework.
Where possible, projects have been legally evaluated in terms of their compliance with the first goal of the European taxonomy **"Mitigation of climate change"**. The table below lists all the projects financed by 2024 borrowing in line with the objective.

LOW-CARBON TRANSPORT						
European taxonomy activity	Technical criteria of economic activity	DNSH criteria				
		Adapting to Climate Change	Sustainable use and protection of water and marine resources	Transition to a circular economy	Pollution prevention and control	Protection and restoration of biodiversity and ecosystems
6.14. RAIL TRANSPORT INFRASTRUCTURES						
Metro projects						
Metro Line 11	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
Metro Line 14	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
Tram projects						
Tram T1	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
Tram T10	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
Tram T12	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
T13 Express tramway	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
Rail link projects						
EOLE	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
6.15. INFRASTRUCTURES FAVOURABLE TO ROAD TRANSPORT AND LOW-CARBON PUBLIC TRANSPORT						
Scheme: Development of exclusive bus lanes and road improvements						
TZEN 4	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
TZEN 5	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned

It is noted that France has implemented sufficient policies, regulations and structures to bring itself into line with the **minimum social guarantees** of European taxonomy. Significant measures are being taken by the le-de-France Region in addition to the national framework to ensure its alignment with the minimum safeguards of the European taxonomy, as reflected under the Region's bond issues.

All the data relating to the alignment of the projects with regard to the regional eligibility criteria and the European taxonomy are available on the **Region's finance portal**: www.iledefrance.fr/financement-region

Dedicated website link
www.iledefrance.fr/sites/default/files/2024-12/transports_taxonomie_uk_02_12_2024_2.pdf

GREEN PROJECTS CATEGORIES	**Green buildings**		
	New secondary school and bording school construction projects	• New high school in Vincennes (94)	• Vincennes (94300)
	Secondary school renovation project	• Henri Becquerel high school in Nangis (91)	• Nangis 77370 ●
		• Albert Camus high school in Bois-Colombes (92)	• Bois-Colombes 92270
		• Urugay France high school in Avon (77)	• Avon 77210
		• Eugène Ronceray high school in Bezons (95)	• Bezons 95870
		• Jules Ferry high school in Versailles (78)	• Versailles 78000
		• Pierre de Coubertin high school in Meaux (77)	• Meaux 77100
		• Evariste Galois high school in Satrouville (78)	• Sartrouville 78500
		• Paul Valéry Regional School Campus in Paris (75)	• Paris 75012 ●
		• Jean Moulin high school in Torcy (77)	• Torcy 77200 ●
		• Gustave Monod high school in Enghien-les-Bains (95)	• Saint-Gratien 95210
		• Adolphe Chérioux high school in Vitry-sur-Seine (94)	• Vitry-sur-Seine 94400 ●
	High education construction project	• Illustration Building in Bobigny (93)	• Bobigny 93000 ●
		• Bréguet Building in Gif-sur-Yvette (91)	• Gif-sur-Yvette 91190 ●
		• Biomedical research Building in Créteil (93)	• Créteil 94000 ●
		• Condorcet Campus in Paris (75)	• Paris 75018 ●
		• Mathstic Building in Villetaneuse (93)	• Villetaneuse 93340
	Clean transportation		
	Subways	• Subway line 11	• Paris, Les Lilas, Romainville, Noisy-le-Sec, Rosny-sous-Bois
		• Subway line 14	• Paris, Clichy, Saint-Ouen-sur-Seine
	Tramways	• Tramway line 1	• Bobigny, Noisy-le-Sec, Romainville, Montreuil, Rosny-sous-Bois, Fontenay-sous-Bois
		• Tramway line 10	• Antony, Châtenay-Malabry, le Plessis-Robinson, Clamart
		• Tramway line 12	• Massy, Palaiseau, Champlan, Longjumeau, Chilly-Mazarin, Epinay-sur-Orge, Savigny-sur-Orge, Morsang-sur-Orge, Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Evry
		• Tramway line 13 Express	• Saint-Cyr-l'Ecole, Versailles, Bailly, Noisy-le-Roi, l'Etang-la-Ville, Mareil-Marly, Saint-Germain-en-Laye
	Railway links	• EOLE	• Paris, Courbevoie, Nanterre, Houilles, Carrières-sur-Seine, Poissy, Villennes-sur-Seine, Les Mureaux, Aubergenville, Epône, Mézières, Mantes-la-Jolie
	Development for bus on own site and layount of roadways	• Cable 1	• Créteil, Valenton, Limeil-Brévannes, Villeneuve-Saint-Georges ●
		• Cycling networks in île-de-France	• / ●
		• Nexteo RER B and D	• / ●
		• TZEN 5	• Paris, Ivry-sur-Seine, Vitry-sur-Seine, Choisy-le-Roi ●
		• TZEN 4	• Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Evry, Corbeil-Essonnes
	Énergies renouvelables		
		• Renewable Heat call for projects - UniGéoin Pantin (93)	• Pantin, Les Lilas, Le Pré-Saint-Gervais ●
		• Renewable Heat call for projects - SMIREC in Epinay-sur-Seine (93)	
		• SAS H2 in Créteil (77)	• Créteil 94000 ●
		• Drilling of a geothermal doublet in Aubervilliers (93)	• Saint-Denis, Aubervilliers ●
		• Géomarne geothermal network in Champs-sur-Marne (77)	• Bro-sur-Chantereine, Champs-sur-Marne, Chelles, Courtry, Croissy-Beaubourg, Emarainville, Lognes, Noisiel, Pontault-Combault, Roissy-en-Brie, Torcy, Vaires-sur-Marne ●
		• Heat network in Rueil-Malmaison (78)	• Rueil-Malmaison 92500 ●
		• Extension of the geothermal network in Villeneuve-Saint-Georges (94)	• Villeuneuve-Saint-Georges 94190 , Valenton 94460 ●
SOCIAL PROJECT CATEGORIES	**Access to essential services: education**		
		• Digital educational materials and resources	• /
		• Nadar high school in Draveil (91)	• Draveil 91210 ●
		• Nicolas-Joseph Cugnot high school in Neuilly-sur-Marne (93)	• Neuilly-sur-Marne 93330
	Support for employment		
		• Energy Efficiency Vouchers	• / ●
	Affordable housing		
		• PLUS and PLS housing residence in Montreuil (93)	• Montreuil 93100 ●
	Affordable basic infrastructures (transport, energy, green spaces and sporting facilities)		
		• CREPS Île-de-France	• Chatenay Malabry 92290

● New project


23
31
29
20
17
19
7
15
2
33
28
3
25
6
35
30
41
39
21
13
22
11
34
18
5
12
8
27
42
24
32
4
36
38
26
14
16
9
10
37
40
Projects impacting
all the users

CLEAN TRANSPORTATION

1. **Subway line 11:** Paris, Les Lilas, Romainville, Noisy-le-Sec, Rosny-sous-Bois (75)
2. **Subway line 14:** Paris, Clichy, Saint-Ouen-sur-Seine (93)
3. **Tramway line 1 :** Bobigny, Noisy-le-Sec, Romainville, Montreuil, Rosny-sous-Bois, Fontenay-sous-Bois
4. **Tramway line 10:** Antony, Châtenay-Malabry, le Plessis-Robinson, Clamart
5. **Tramway line 12:** Massy, Palaiseau, Champlan, Longjumeau, Chilly-Mazarin, Épinay-sur-Orge, Savigny-sur-Orge, Morsang-sur-Orge, Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Évry
6. **Tramway line 13 Express:** Saint-Cyr-l'École, Versailles, Bailly, Noisy-le-Roi, l'Étang-la-Ville, Mareil-Marly, Saint-Germain-en-Laye
7. **EOLE:** Paris, Courbevoie, Nanterre, Houilles, Carrières-sur-Seine, Poissy, Villennes-sur-Seine, Les Mureaux, Aubergenville, Épône, Mézières, Mantes-la-Jolie
8. **Cable 1:** Créteil, Valenton, Limeil-Brévannes, Villeneuve-Saint-Georges
9. **Cycling networks in île-de-France**
10. **Nexteo RER B and D**
11. **TZEN 5:** Paris, Ivry-sur-Seine, Vitry-sur-Seine, Choisy-le-Roi
12. **TZEN 4:** Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Évry, Corbeil-Essonnes

GREEN BUILDINGS

13. New high school in Vincennes (94)
14. Henri Becquerel high school in Nangis (77)
15. Albert Camus high school in Bois-Colombes (92)
16. Urugay France high school in Avon (77)
17. Eugène Ronceray high school in Bezons (95)
18. Jules Ferry high school in Versailles (78)
19. Pierre de Coubertin high school in Meaux (77)
20. Evariste Galois high school in Sartrouville (78)
21. Paul Valéry Regional School Campus in Paris (75)
22. Jean Moulin high school in Torcy (77)
23. Gustave Monod high school in Enghien-les-Bains (95)
24. Adolphe Chérioux high school in Vitry-sur-Seine (94)
25. Illustration Building in Bobigny (93)
26. Bréguet Building in Gif-sur-Yvette (91)
27. Biomedical research Building in Créteil (93)
28. Condorcet Campus in Paris (75)
29. Mathstic Building in Villetaneuse (93)

RENEWABLE ENERGY

30. Renewable Heat call for projects - UniGéoin Pantin (93)
31. Renewable Heat call for projects - SMIREC in Épinay-sur-Seine (93)
32. SAS H2 in Créteil (94)
33. Drilling of a geothermal doublet in Aubervilliers (93)
34. Géomarne geothermal network in Champs-sur-Marne (77)
35. Heat network in Rueil-Malmaison (78)
36. Extension of the geothermal network in Villeneuve St-Georges (94)

SOCIAL PROJECT CATEGORIES

37. Digital educational materials and resources
38. Nadar high school in Draveil (91)
39. Nicolas-Joseph Cugnot high school in Neuilly-sur-Marne (93)
40. Energy Efficiency Vouchers
41. PLUS and PLS housing residence in Montreuil (93)
42. CREPS Île-de-France

Summary of the impact of projects and footprint of the 2024 green and sustainable bond

		PROJECT PURPOSE
GREEN PROJECTS	**GREEN BUILDINGS**	
	New secondary school and bording school construction projects	
	New high school in Vincennes (94)	Construction of a 1,050-seat high school
	Secondary school renovation project	
	Henri Becquerel high school in Nangis (77) ●	Construction of a new building
	Albert Camus high school in Bois-Colombes (92)	Overall renovation and extension
	Urugay France high school in Avon (77)	Restructuring and creation of a dormitory
	Eugène Ronceray high school in Bezons (95)	Restructuring and creation of a dormitory
	Jules Ferry high school in Versailles (78)	Restructuring
	Pierre de Coubertin high school in Meaux (77)	Overall renovation and extension
	Evariste Galois high school in Sartrouville (78)	Overall renovation and extension
	Paul Valéry Regional School Campus in Paris (75) ●	Renovation
	Jean Moulin high school in Torcy (77) ●	Restructuring
	Gustave Monod high school in Enghien-les-Bains (95)	Restructuring and extension
	Adolphe Chérioux high school in Vitry-sur-Seine (94) ●	Restructuring and renovation
	Higher education construction project	
	Illustration Building in Bobigny (93) ●	Restructuring
	Bréguet Building in Gif-sur-Yvette (91) ●	Restructuring
	Biomedical research Building in Créteil (93) ●	New construction
	Condorcet Campus in Paris (75) ●	New construction
	Mathstic Building in Villetaneuse (93)	New construction
	CLEAN TRANSPORTATION	
	Subway line 11	Extension to Rosny-Bois-Perrier
	Subway line 14	Extension to Saint-Ouen City Hall
	Tramway line 1 ●	Extension to Val-de-Fontenay
	Tramway line 10	Construction of a new tramway line between Antony and Châtenay-Malabry
	Tramway line 12	T12 between Massy-Palaiseau and Evry Courcouronnes
	Tramway line 13 Express	T13 on the Great Belt West to the North and South
	Eole	Extension of the RER E westwards
	Cable 1 ●	Urban cable car between Créteil and Villeneuve-Saint-Georges
	Cycling networks in Île-de-France ●	Cycling networks and the Île-de-France bike network
	Nexteo RER B & D ●	Computer software for RER B & D
	TZEN 5 ●	New bus line between Paris and Choisy-le-Roi
	TZEN 4	New bus line between Viry-Châtillon and Corbeil-Essonnes
	RENEWABLE ENERGIES	
	Renewable heat call for projects - Unigéo in Pantin (93) ●	Creation of a geothermal network in Pantin, Les Lilas, Le Pré-Saint-Gervais (93)
	Renewable heat call for projects - SMIREC in Epinay-sur-Seine (93) ●	Development of a district heating network powered by deep geothermal energy
	Drilling of a geothermal doublet in Aubervilliers (93) ●	Drilling of a geothermal doublet to supply the SMIREC district heating network in the municipality of Aubervilliers
	Géomarne geothermal network in Champs-sur-Marne (77) ●	Creation of a geothermal network
	Heat network in Rueil-Malmaison (78) ●	Drilling of a geothermal doublet and extension of the geothermal district heating network in Rueil-Malmaison
	Extension of the geothermal network in Villeneuve St-Georges (94) ●	Extension of the geothermal network from Villeneuve-Saint-Georges to the city of Valenton
	SAS H2 in Créteil (77) ●	Construction of a renewable hydrogen production unit and distribution station
SOCIAL PROJECT CATEGORIES	**ACCESS TO ESSENTIAL SERVICES: EDUCATION**	
	Digital educational materials and resources	Provision of individual digital equipment for high schools and teachers in the Île-de-France region
	Nadar high school in Draveil (91)	Extension
	Nicolas-Joseph Cugnot high school in Neuilly-sur-Marne (93)	Restructuring
	SUPPORT FOR EMPLOYMENT	
	Energy Efficiency Vouchers ●	Support VSMEs in their energy transition
	AFFORDABLE HOUSING	
	PLUS and PLS housing residence in Montreuil (93) ●	Students housing construction
	AFFORDABLE HOUSING	
	CREPS in Île-de-France	Construction and restructuring of sports infrastructure

* Sum of site FTEs and operating FTEs, including integration FTEs where applicable.

● New project

IMPACT OF PROJECTS AND SCHEMES SUBMITTED				FOOTPRINT OF THE 2024 GREEN AND SUSTAINABLE BOND (PROJECT IMPACT WEIGHTED BY THE WEIGHT OF THE LOAN IN THE PROJECT FINANCING)			
TOTAL PROJECT COST IN € MILLIONS (1)	CO_2 EMISSIONS (TEQ/YEAR) AVOIDED BY THE PROJECT	FTE SUPPORTED BY THE PROJECT *	NUMBER OF PROJECT BENEFICIARIES	AMOUNT OF 2024 GREEN AND SUSTAINABLE BORROWING ALLOCATED TO THE PROJECT IN € MILLION (2)	WEIGHT (2) / (1)	CO_2 EMISSIONS (TEQ/YEAR) AVOIDED BY THE PROJECT	FTE SUPPORTED
51.5	30.34	512	1,050	2.7	5.24%	2	55
41.3	1.1	230	1,250	4.1	9.93%	0.11	23
65.6	168.2	430	1,470	6.4	9.76%	16	42
48.75	23.65	345	1,750	12.1	24.82%	6	86
68.2	160.5	370	1,050	7.1	10.41%	17	39
26.8	3.75	260	1,700	5	18.66%	1	49
120.84	32.82	813	2,330	9.3	7.70%	3	63
86.6	92.45	584	2,170	10.5	12.12%	11	71
85.9	93.78	495	1,856	28.2	32.83%	31	163
48.6	14.59	465	1,106	10	20.58%	3	96
41.9	264.2	245	1,000	3.6	8.59%	23	21
97.5	95.84	670	1,500	4.2	4.31%	4	29
27.3	304.2	50	4,877	7.9	28.94%	88	14
83	-	300	5,400	5.6	6.75%	-	20
19	-	75	260	8.3	43.68%	-	33
69.7	-	202	3,500	8.7	12.48%	-	25
9.1	13.51	66	414	2.8	30.77%	4	20
1,298	3,255	9,216	331,000	22.7	1.75%	57	161
1,380	7,310	9,798	176,000	1.1	0.08%	6	8
485.4	-	-	46,000	42.7	8.80%	-	-
351	31,237	-	170,000	14.2	4.05%	1,264	-
526	2,543	4,095	40,000	30.7	5.84%	148	239
434.8	1,116	2,178	21,000	8.1	1.86%	21	41
5,429	8,040	26,554	1,400,000	328.9	6.06%	487	1,609
127	-	-	3,200,000	9.6	6.86%	-	-
850	-	-	137	22.6	2.66%	-	-
1,202	-	-	1,650,000	61.7	5.13%	-	-
117	-	-	51,000	8.8	7.52%	-	-
124	-	880	47,000	24.3	19.60%	-	172
79.3	25,000	-	20,000	3.8	4.79%	1,198	0.14
62.2	227,820	-	10,160	1.4	2.25%	57	-
31.9	7,500	-	7,500	0.9	2.82%	212	-
19	25,000	-	10,000	1.1	5.79%	1,447	-
51.9	21,000	-	9,500	1.1	2.12%	445	-
18.6	13,100	-	6,100	0.9	4.84%	634	-
7.6	1,300	-	93,500	0.9	11.84%	154	-
375	-	1	500,000	62.5	16.67%	-	0.17
32.2	10.7	255	1,450	3.2	9.94%	1	25
51.6	16.91	329	1,200	3.7	7.17%	1	24
11.3	-	1,590	-	6.3	55.75%	-	-
11.5	-	150	67.54	0.7	6.09%	-	9
37	689	5.6	320	1.6	4.32%	30	0.24

All the data are available in a spreadsheet format on the Region's website

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

			1 NO POVERTY	4 QUALITY EDUCATION	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY
GREEN PROJECTS	Green buildings	New high school in Vincennes (94)	-	4.1	6.5	7.3
		Henri Becquerel high school in Nangis (94)	-	4.1	6.5	7.3
		Albert Camus high school in Bois-Colombes (92)	-	4.1	6.5	7.3
		Uruguay-France high school in Avon (77)	-	4.1	6.5	7.3
		Eugène Ronceray high school in Bezons (95)	-	4.1	6.5	7.3
		Jules Ferry high school in Versailles (78)	-	4.1	6.4	7.3
		Pierre de Coubertin high school in Meaux (77)	-	4.1	6.4	7.3
		Evariste Galois high school in Sartrouville (78)	-	4.1	6.4	7.3
		Jean Moulin high school in Torcy (77)	-	4.1	6.4	7.3
		Gustave Monod high school in Enghien-les-Bains (95)	-	4.1	6.5	
		Adolphe Chérioux high school in Vitry-sur-Seine (94)	-	4.1	6.4	7.3
		Paul Valéry Regional School Campus in Paris (75)	-	4.1	6.4	7.3
		Illustration Building in Bobigny (93)	-	4.3	6.4	7.3
		Condorcet Campus in Paris (75)	-	4.3	6.4	7.3
		Bréguet Building in Gif-sur-Yvette (93)	-	4.3		7.3
		Biomedical research Building in Créteil (93)	-	4.3	6.4	
		Mathstic Building in Villetaneuse (93)	-	4.3	6.4	7.3
	Clean transportation	Subway line 11	1.b	-	-	-
		Subway line 14	1.b	-	-	-
		Tramway line 1	1.b	-	-	-
		Tramway line 10	1.b	-	-	-
		Tramway line 12	1.b	-	6.4	-
		Tramway line 13 Express	1.b	-	-	-
		Cable 1	1.b	-	-	-
		Cycling networks in Île-de-France	-	-	-	-
		EOLE	1.b	-	-	-
		Nexteo RER B and D	-	-	-	-
		TZEN 4	1.b	-	-	-
		TZEN 5	1.b	-	-	-
	Renewable energies	Renewable Heat call for projects - UniGeo in Pantin (93)	1.b	-	-	7.2
		Renewable Heat call for projets - SMIREC in Aubervilliers (93)		-	-	7.2
		Drilling of a geothermal doublet in Epinay-sur-Seine (93)	1.b	-	-	7.2
		Géomarne geothermal network in Champs-sur-Marne (77)	1.b	-	-	7.2
		Heat network in Rueil-Malmaison (78)	1.b	-	-	7.2
		Extension of the geothermal network in Villeneuve-St-Georges (94)	-	-	-	7.2
		SAS H2 in Créteil	-	-	-	7.2
SOCIAL PROJECT CATEGORIES	Access to essential services: education	Nadar high school in Draveil (91)	-	4.1	6.4	7.3
		Digital education material and resources	1.4	4.1		-
		Nicolas-Joseph Cugnot in high school in Neuilly-sur-Marne (93)	-	4.1	6.4	
	Affordable housing	PLUS and PLS housing residence in Montreuil (93)	1.b	-	-	7.2
	Support for employment	Energy Efficiency Vouchers	1.b	-	-	7.3
	Affordable basic infrastructures	CREPS in Île-de-France	-	-	6.4	7.2

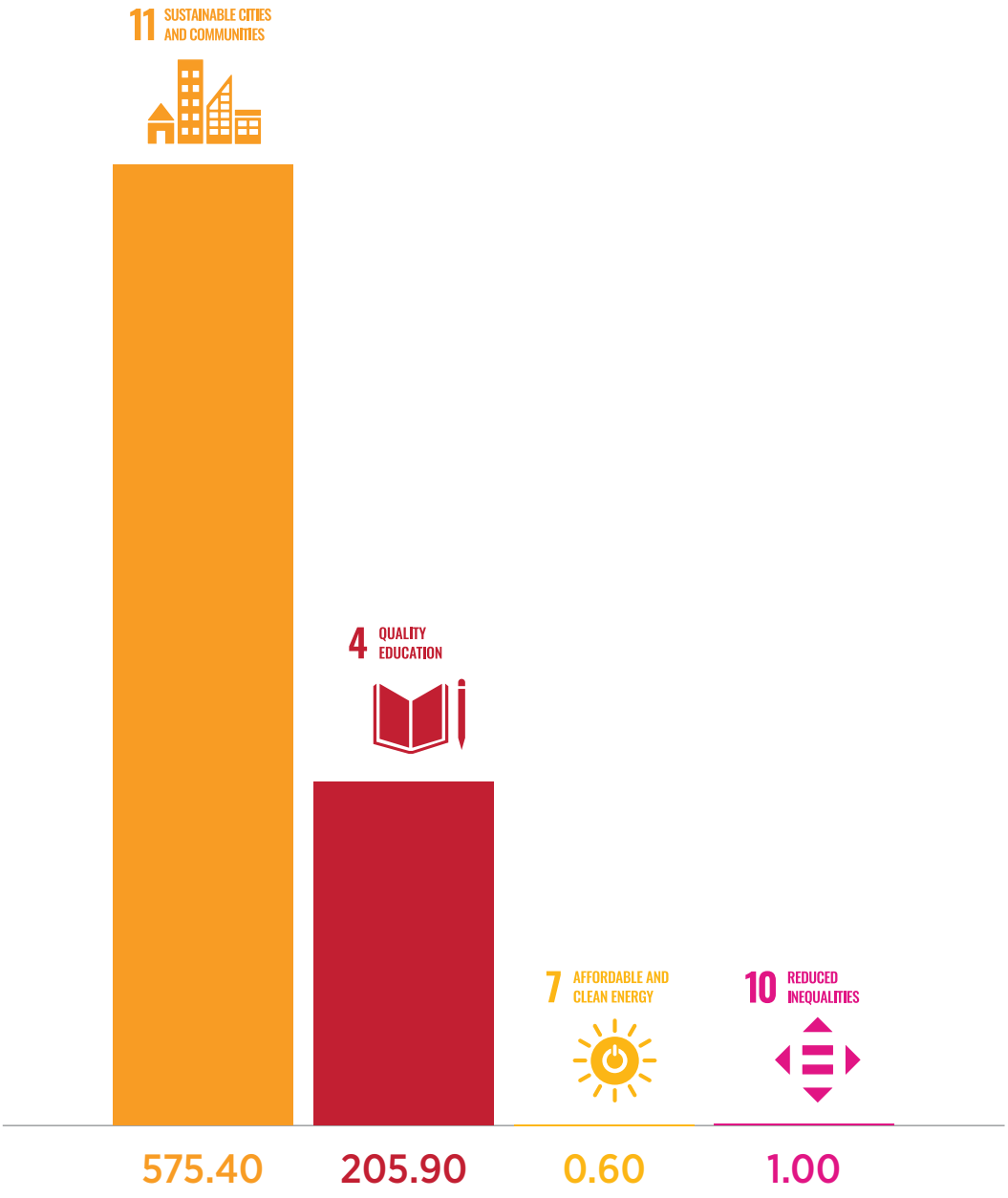
Main SDG

8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	15 LIFE ON LAND	IMPACT INDICATOR OF THE MAIN SDG	PAGES
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	*
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	p. 26
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	*
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	p. 28
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	p. 36
8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	*
8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	p. 32
8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	p. 34
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	*
8.6	9.1	10.3	11.3	12.7	13.2	-	-	*
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	*
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	p. 30
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	p. 40
8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	p. 38
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	p. 42
8.6	9.1	10.3	11.3	12,7	-	-	Number of beneficiaries	*
8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	*
8.3	9.1	10.2	11.2	12.7	13.2	-	CO_2 emissions avoided by the project	p. 46
8.3	9.1	10.2	11.2	12.7	13.2	-	CO_2 emissions avoided by the project	*
8.3	9.1	10.2	11.2	12.7	13.2	-	CO_2 emissions avoided by the project	p. 48
8.3	9.1	10.2	11.2	12.7	13.2	15.1	CO_2 emissions avoided by the project	*
8.3	9.1	10.2	11.2	12.7	13.2	-	CO_2 emissions avoided by the project	p. 50
8.3	9.1	10.2	11.2	12.7	13.2	15.1	CO_2 emissions avoided by the project	*
8.3	9.1	10.2	11.2	12.7	-	-	CO_2 emissions avoided by the project	p. 56
-	-	-	11.2	-	13.2	-	CO_2 emissions avoided by the project	*
8.3	9.1	10.2	11.2	12.7	13.2	-	CO_2 emissions avoided by the project	p. 52
	9.1	-	-	-	-	-	CO_2 emissions avoided by the project	*
8.3	9.1	10.2	11.2	12.7	13.2	15.1	CO_2 emissions avoided by the project	p. 54
8.3	9.1	10.2	11.2	12.7	13.2	15.1	CO_2 emissions avoided by the project	*
8.6	9.1	10.2	11.3	12.7	-	-	CO_2 emissions avoided by the project	p. 60
		10.2	11.3	12.7	-	-	CO_2 emissions avoided by the project	*
8.6	9.1	10.2	11.3	12.7	-	-	CO_2 emissions avoided by the project	p. 62
8.6	9.1	10.2	11.3	12.7	-	-	CO_2 emissions avoided by the project	p. 64
8.6	9.1	10.2	11.3	12.7	-	-	CO_2 emissions avoided by the project	*
8.6		10.2	11.3	12.7	-	-	CO_2 emissions avoided by the project	*
8.6		10.2	11.3	12.7	13.2	15.1	CO_2 emissions avoided by the project	*
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	*
8.6	9.c	10.2	-	12.5	-	-	Number of beneficiaries	p. 68
8.6	9.1	10.3	11.3	12.7	13.2	-	Number of beneficiaries	*
-	9.1	10.3	11.b	12.7	13.2	15.1	Number of beneficiaries	p. 80
-	9.1	10.3	-	12.7	13.2	-	Number of beneficiaries	p. 76
-	9.1	10.2	11.3	12.7	13.2	-	Number of beneficiaries	p. 72

* Factsheets available on the Region's website.

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

- The next table compiles the contribution made by each project to the United Nations Sustainable Development Goals (SDG). This is assessed individually based on the specific features of each project as described in the sheets accompanying this report.
- For each project, the main Sustainable Development Goal is identified by highlighting colour.
- The projects have been assessed with respect to eleven goals out of seventeen (see Appendix 1.2 of this report page 84).
- The graph opposite indicates the scale of financing the main SDG by projects presented within in this report. It also highlights that financing allocated to SDG 11 "Sustainable cities and communities" dominates, which is consistent with both the nature of the Île-de-France Region as a regional authority and its predominantly urban character.



©Cédric Helsly

GREEN BUILDINGS

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

The Region adopted in 2017 a new provisional investment programme for secondary schools in consultation with the local educational authorities and communities in the Île-de-France region. Through this plan, updated in 2021, there will be doubling of resources for secondary education, in order to reflect demographic changes and new school dynamics: 90,000 students are expected between 2012 and 2030, reflecting the region's growth. In December 2024, 14,000 new needed places were delivered, and 12,000 are being created.

The **priority environmental objectives** for upcoming new construction projects will focus **on bioclimatic design and energy efficiency**; respecting the site's biodiversity and managing water at the plot level; air quality and acoustics; reducing construction site nuisances and managing waste.

- **Development of sector-specific technical guidelines for sustainable development,** which constitute regional guides for integrating sustainable development concerns into projects.
- Region's powers/responsibilities: **Mandatory for secondary schools, higher-education projects forming part of state-region relations.**
- Types of actions:

  → **Secondary schools:** Contracting authority with representative (construction and renovation projects) ;
  → **Higher education:** Subsidy or direct contracting authority.

- **Target public:** Secondary school students, university students, teachers, researchers.

EXTENSION OF HENRI BECQUEREL HIGH SCHOOL IN NANGIS (77)

CONSTRUCTION OF A NEW SCHOOL • NEW PROJECT

PURPOSE

Construction of a new building to increase the capacity of Becquerel High School.

LOCATION(S)

Nangis (77)

KEY DATES

Project management competition in 2022–2023
Start of work in November 2023
Completion of work expected in April 2027

TOTAL PROJECT COST

€41.3M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

100%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€4.1M

QUALITATIVE PRESENTATION OF THE PROJECT

- In order to respond to a growing workforce in Nangis, the project aims to **increase the capacity of the high school from 700 to 1,293 students.** The project therefore consists of a **new construction on level R+1 of 3,920 m² of floor area** to achieve this objective. This new building will house the administration, the medical-social centre, classrooms, the lecture hall, the administrative centre and the school canteen.
- The five modular buildings that were used to temporarily accommodate the high school's increased workforce will be demolished.
- Work on the existing building are limited and mainly relate to **regulatory and functional upgrades** necessary for connection with the new building planned.
- The architecture of building A of the high school, in a crescent shape, has a remarkable appearance. **The work undertaken is carried out in compliance with the initial design.**
- The project incorporates several **innovative elements: raw earth bricks** in the facade and in the classrooms, **wind towers** for the ventilation in the school canteen, etc.
- The project is part of an effort to make the school more **energy efficient** and **reduce its carbon footprint**. The project is adapted **to climate change** with a design that guarantees hygrothermal comfort for the occupants.
- A **wooden frame** is planned for the roof. The project aims for the level 2 "Bio-based building" label with 30.16 kg/m² of surface area of bio-based materials. **90% of demolition waste and 70% of construction waste are recovered**. Finally, the high school is equipped with a **pellet wood boiler plant**: the heating energy is therefore from sustainable sources.
- The outdoor facilities were designed to **highlight the biodiversity on the site**, with a green roof of 2,328 m² and 500 m² of open-ground spaces with unrestricted biodiversity.

PROJECT LIFECYCLE

- After the connection of the utility service providers, work on the extension began at the end of 2023. They are expected to be completed for delivery of **the building in early 2026**;
- The second phase of the works, including the restructuring of the existing building and the redevelopment of the outdoor spaces, will begin after delivery of the extension, for **acceptance in April 2027**.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	230	A-2
Number of project beneficiaries	1,250	D-1
CO_2 emissions avoided by the project	1.11 teq CO_2/year	E-4

CATEGORY ELIGIBILITY CRITERIA

Construction of buildings according to a sustainable development approach, contributing to respect for the environment

Required energy consumption level <-40% compared to RT 2012

- The BEPOS assessment of the new building (44.6 kWh/m²/year) classifies it at level E3 of the E+C- reference standard (BEPOS_max level E3: 54.7 kWh/m²/year).
- As the workshops are not subject to the RT Globale regulation, they have only been assessed on an element-by-element basis.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• **All the environmental aspects of the project were taken into account:** bioclimatic design, biodiversity, water management, pollution, public health, etc. (see above).
Combating of climate change and promotion of the region's ecological transition	• The project is part of an approach to **reducing its carbon footprint**, with a new building complying with level E3 of the E+C- reference standard. • In addition, the project meets ambitious objectives in terms of integrating bio-based materials thanks to a wooden frame and the recovery of demolition materials. • Finally, the project provides for the installation of a **biomass boiler room**, a renewable heat source.
Contribution to sustainable regional planning and improvement to the quality of life	• The project design makes it **possible to limit rainwater discharge to the network** to 0.7 L/s/ha for a 10-year return rainfall. The project includes a landscaped infiltration swale, 2,328 m^2 of green roofs and evergreen car parks. **The site's desealing is reduced compared to the initial condition**. Some of the rainwater will also be recovered in a tank (20-30 m^3) to then be used in the secondary school's sanitary facilities. • **Biodiversity** is developed by integrating an area of unrestricted biodiversity into the landscape project, a green roof, wildlife shelter, educational garden, landscape swale, etc.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• The facility is accessible to people with disabilities. It complies with fire safety regulations.
Respect for fundamental rights	• Combating social, educational and territorial inequalities.
Responsible regional development	• The dormitory buildings were designed to benefit **student learning and living** conditions (acoustic and thermal comfort, capacity of adapted spaces, etc.). It is therefore part of the development of a quality educational offer in the region.
Regional economic development	• The construction site and the project's operations **generate jobs** (including a substantial part of local jobs).
Fair practices, responsible purchasing and responsible supplier relations	• Compliance with the criteria/rules of the region and the public procurement code. • Strict standards on the choice of construction products and equipment (bio-based materials, resource saving, etc.).
Promotion of a suitable consultation procedure with internal and external stakeholders	• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region. • Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.

The project website
www.idf-constructiondurable.fr/realisations/liste-des-realisations/lycee-henri-becquerel-181

RENOVATION AND EXPANSION OF THE URUGUAY-FRANCE SECONDARY SCHOOL IN AVON (77)

SUSTAINABLE DEVELOPMENT GOALS

PURPOSE

Restructuring of buildings C, D, E, F
and creation of a new boarding school with 200 beds.

LOCATION(S)

Avon (77)

KEY DATES

Project management bidding competition in 2013-2015
Studies in 2017-2020
Start of construction at the end of 2020
Reception scheduled for the 2024 start of the school year

TOTAL PROJECT COST

€48.75M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

100%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€12.1M

HISTORY OF PROJECT

Financing by the Region's previous green and sustainable bonds

QUALITATIVE PRESENTATION OF THE PROJECT

- The project plans for the **partial restructuring of the existing buildings** and the **creation of a new boarding school** for the Uruguay France secondary school in Avon:
  - → Complete restructuring of existing buildings C, D, E and F to create new classrooms;
  - → Creation of a dormitory building located at the entrance to the secondary school;
  - → Outdoor space landscaping and development (green spaces, roads, networks, fences).
- The project is part of an effort to make the school more **energy efficient** and **reduce its carbon footprint**. The project is adapted **to climate change** with a design that guarantees hygrothermal comfort for the occupants.
- The design of the project respects the principle of **zero waste** for rainwater. This is managed on the site by creating **green roofs**, water traps, retention basins and a vegetation covered car park. **The project increases the permeability of the site.**
- The landscaping programme includes the implantation of indigenous species from the Fontainebleau Forest in the heart of the patio, with a recreated **condensed biotope of flora** promoting the spontaneous arrival of fauna. Protected and noteworthy species are emphasised for educational purposes.
- In order to **preserve air quality**, all materials used and in contact with the indoor air have suitable eco-labels.
- The **visual comfort of the users** has been particularly developed by providing optimised and variable daylight to the space

PROJECT LIFECYCLE

- The work started at the end of 2020.
- Inauguration in September 2024, for **the start of the school year.**

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological rate
FTE supported by the project	343	A–2
Number of project beneficiaries	1,750	D-1
CO_2 emissions avoided by the project	23.65 teq CO_2/year	E–4

REGIONAL ELIGIBILITY CRITERIA

Renovation of buildings according to a sustainable development approach, contributing to respect for the environment

Reduction in primary energy consumption (PEC) of at least 30%.

- Boarding school: primary energy consumption is estimated at 41.3 kWhep/m²/year, i.e. 60% lower than the maximum primary energy consumption calculated by RT2012 (108 kWhep/m²/year)
- Renovated buildings (C, D, E, and F): The primary energy consumption of the renovated buildings is estimated at 64.52 kWhep/m²/year. The initial consumption was not assessed.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, disturbances, health, etc. (see above).
Combating of climate change and promotion of the region's ecological transition	• The project is part of an effort to reduce its carbon footprint, with a significant reduction in the energy consumption of new and renovated buildings.
Contribution to sustainable regional planning and improvement to the quality of life	• Rainwater management on the plot (green roofing, vegetation covering, swales). The zero-waste initiative is respected up to the 30-year rainfall return period. • Biodiversity is developed through the greening of the central patio in line with the ecosystems of the Fontainebleau Forest where the secondary school is located.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• The facility is accessible to people with disabilities. It complies with fire safety regulations.
Respect for fundamental rights	• Combating social, educational and territorial inequalities
Responsible regional development	• The dormitory buildings were designed to benefit **student learning and living** conditions (acoustic and thermal comfort, capacity of adapted spaces, etc.). It is therefore part of the development of a quality educational offer in the region. • The dormitories also allow students living in geographically remote areas to attend the school.
Regional economic development	• The construction site and the project's operations **generate jobs** (including a substantial part of local jobs).
Fair practices, responsible purchasing and responsible supplier relations	• Compliance with the criteria/rules of the region and the public procurement code. • Strict standards on the choice of construction products and equipment (bio-based materials, resource saving, etc.).
Promotion of a suitable consultation procedure with internal and external stakeholders	• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region. • Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.

The project website
www.idf-constructiondurable.fr/realisations/liste-des-realisations/lycee-uruguay-france-a-avon-729

COMPREHENSIVE RENOVATION OF THE CITÉ MIXTE PAUL VALÉRY (SCHOOL COMPLEX) IN PARIS 12 (75)

HIGH SCHOOL BUILDING CONSTRUCTION AND RENOVATION • NEW PROJECT

PURPOSE

Comprehensive renovation of the Paul Valéry "cité mixte régionale" (mixed regional complex) (middle + high school) in the 12th arrondissement of Paris.

LOCATION(S)

Paris 12 (75)

KEY DATES

Preliminary surveys: 2019
Award notification of the global performance contract: May 23rd 2022
Preliminary injection work: summer 2022
Installation work of demountable buildings: autumn 2022
Works: January 2023 - February 2026

TOTAL PROJECT COST

€85.9M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

68.93% (City of Paris: 31.07%)

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€28.2M

QUALITATIVE PRESENTATION OF THE PROJECT

- The Cité Mixte Paul Valéry comprises a middle school and high school on the complex, managed by a joint administration. The overall renovation is focused on **making a distinction between the middle school and the high school** by allocating separate spaces to each one while merging certain functions (administration, etc.). This operation also aims to create an **artificial intelligence campus**. In this context, the high school will share a connected building dedicated to artificial intelligence. Finally, a green **space that can be used by the public** will be built on campus.
- The work thus includes the **renovation and raising to level R+4 of the current block** (main building) and the **creation of new buildings**: school canteen, library/resource centre, administration, caretaker's lodge, totem and demolition of old deteriorated buildings. Construction of green spaces.
- The work is being carried out on an **occupied site** and therefore must adhere to a precise schedule to ensure the continuation of classes in suitable conditions.
- The project is part of an effort to make the school more **energy efficient** and **reduce its carbon footprint**. The project is adapted **to climate change** with a design that guarantees hygrothermal comfort for the occupants.
- Elevations and new buildings will be constructed in a **lightweight wood structure**, achieving a target of 42 kg/m² surface area of bio-based materials in new spaces and 14 kg/m² in renovated spaces.
- The project is the subject of an on-site **reuse strategy**, in particular the reuse of wood materials from the former school canteen for the production of display cases.
- The project is accompanied by an ambitious greening strategy: desealing the plot, greening the roofs, creation of rainwater collection basins, etc. **156 trees will be planted** and 29 will be preserved.

PROJECT LIFECYCLE

- Work began in July 2022;
- The high school part (Blocks 1, 2 and 3 of the main block) as well as the school canteen and the Totem were handed over in **September 2024**;
- Work is underway on the middle school part and the function buildings (Blocks 4, 5 and 6 of the main block) as well as the construction of the new library/resource centre and administration offices, which will be handed over in **September 2025**;
- The last demolition work and construction of the green spaces will take place from September 2025 to early 2026.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	495	A-2
Number of project beneficiaries	1,856	D-1
CO_2 emissions avoided by the project	93.78 teqCO_2/year	E-4

CATEGORY ELIGIBILITY CRITERIA

Renovation of buildings according to a sustainable development approach, contributing to respect for the environment **• Primary energy consumption reduction level (Cep) of at least 30% (Cepproject ≤ Cepinitial - 30%**	• For new buildings excluding housing (not subject to RE2020 at the time of submission of the CP), the BEPOS assessment makes it possible to achieve level E3 of the E+C- reference standard. • For new residential buildings, subject to RE2020, the primary energy consumption of RE2020 is 63.4 kWhep/m²/year, i.e. savings 33% compared to the Cep_max of RE2020 (94.9 kWh/m²/year). • For renovated buildings, the project's primary energy consumption, calculated according to the RT Existing baseline, is 53.2 kWhep/m2/year, i.e. savings of 58% compared to the initial primary energy consumption (126.4 kWhep/m2/year). • It should be noted that the BEPOS calculated over the entire project also reaches the E3 level of the E+C-

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, harmful substances, health, etc. (see above).
Combating of climate change and promotion of the region's ecological transition	• The project is part of an effort to reduce the carbon footprint of the facility, with a significant reduction in the energy consumption of new and renovated buildings. The project includes significant proportions of **bio-based materials** in its design, especially for new buildings that will feature a wooden structure.
Contribution to sustainable regional planning and improvement to the quality of life	• Management of rainwater at the site level through collection/infiltration basins and green roofs. Water waste is limited to 10 L/s/ha for a 10-year rainfall period. • **Biodiversity** is being developed thanks to a landscape project designed to fit into the Parisian green way. In addition, **part of the courtyard may be open to the general public** when the school complex is closed to the school public.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• The facility is accessible to people with disabilities. It complies with fire safety regulations.
Respect for fundamental rights	• Combating social, educational and territorial inequalities.
Responsible regional development	• The site has been designed to provide the **best possible learning and living environments** for students in terms of acoustic and thermal comfort, capacity, etc. The project is designed to **improve the functional organisation** of the site, with a holistic approach and the separation of the high school and middle school parts (including 2 separate entrance halls).
Regional economic development	• The construction site and the project's operations **generate jobs** (including a substantial part of local jobs).
Fair practices, responsible purchasing and responsible supplier relations	• Compliance with the criteria/rules of the region and the public procurement code. • Demanding choice of building products and equipment to include bio-sourced materials, resource conservation, **reusability**, etc.
Promotion of a suitable consultation procedure with internal and external stakeholders	• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region. • Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.

The project website
www.idf-constructiondurable.fr/information-transversale/actualites/renovation-de-paul-valery-paris-12-designation-de-lequipe-du-mgp-830

OVERALL RENOVATION WITH EXTENSION OF THE PIERRE DE COUBERTIN LYCÉE IN MEAUX (77)

LYCÉE BUILDING CONSTRUCTION AND RENOVATION

PURPOSE

Overall renovation and extension of the Pierre de Coubertin high school, including the development of the aviation professions centre.

LOCATION(S)

Meaux (77)

KEY DATES

Analyses: 2020 – 2023 (building V) to 2024 (other new buildings)
Building V works (avionics hall): 2023 – 2024
Work on other new buildings: 2025 – 2027
Building A renovation work: 2027- 2028
Reception building V: RS2024; and other buildings: RS2028 (subject to asbestos and structure diagnostics)

TOTAL PROJECT COST

€12.84M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

100%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€9.3M

HISTORY OF PROJECT

Financing by the Region's previous green and sustainable bonds

2018	2019	2020	2021	2022	2023
-	-	-	-	-	€3.4M

QUALITATIVE PRESENTATION OF THE PROJECT

- The aims of the project are to **improve the functional organization of the school's facilities**, with the creation of teaching premises adapted to the training courses on offer, to eventually **accommodate 2,330 students**, and to **develop the aviation professions section**.
- The project includes the demolition of several obsolete buildings, the construction of an avionics hall (building V), half board and boarding school facilities (building I), a building for staff housing (building L), a gymnasium (building G) as well as the overall renovation of building A dedicated to teaching and its extension (building A+).
- The project is part of an effort to make the school more **energy efficient** and **reduce its carbon footprint**. The project is adapted **to climate change** with a design that guarantees hygrothermal comfort for the occupants.
- A large number of **bio-based materials** are used, including wood certified "Bois de France". A minimum of 40 kg/sqm of bio-based materials in a given surface area is targeted for new construction and 30 kg/sqm for renovated areas.
- The design of the project complies with the **limitation on rainwater discharge** of to 2 litres/second/hectare for a thirty-year rainfall event: rainfall is managed on the plot using retention basins and swales.
- The program calls for establishing **23,943 m² of open-ground areas** to enhance biodiversity. This development will enhance the **ecological continuum** in which the secondary school is located, by creating shelters for wildlife and choosing appropriate local plant species.
- In order to preserve air quality, all materials used and in contact with the indoor air will have A+ eco-labels. In addition, **M5+F7+F9 filtration is installed on the double-flow AHUs** to improve the quality of handled air.

PROJECT LIFECYCLE

- Construction of the avionics hall began in 2023. This building will be handed over in the summer of 2024;
- Preparation of the temporary buildings is planned for the third quarter of 2024;
- Demolition of the obsolete buildings and construction of the new ones started in 2025, with handover at the beginning of the 2028 school year, subject to asbestos and structural defects diagnoses.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	813	A-2
Number of project beneficiaries	2,330	D-1
CO_2 emissions avoided by the project	36.82 teq CO_2/year	E-4

CATEGORY ELIGIBILITY CRITERIA

- **Renovation:**
  > Reduction in primary energy consumption (PEC) of at least 30%.
- **Construction:**
  Required energy consumption level < -40% compared with RT 2012.
  (equivalent to level E3C1 of the E+C- Label)

- The primary energy consumption of some buildings (A+ and L) was assessed according to the RE2020 baseline and for others (V, G and I) according to the RT2012 baseline. It is therefore not possible to give an overall RT2012 value for the project. Nevertheless, all new buildings have been assessed according to the E+C standard. They all attain the E3 level.
- On building A, the renovation works reduce primary energy consumption by 154.8 kWhep/sqm/year initially to 57.19 kWhep/sqm/year after renovation, i.e. a 63% gain.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, harmful substances, health, etc. (see above).
Combating of climate change and promotion of the region's ecological transition	• The project is part of an effort to **reduce the carbon footprint of the facility**, with a significant reduction in the energy consumption of a renovated Building A and achieving ambitious carbon targets for new buildings. The project also complies with the Fibois Pact Gold level with the use of 40 kg/sqm of surface area for bio-based materials on new buildings.
Contribution to sustainable regional planning and improvement to the quality of life	• Rainwater management on the plot to include retention ponds and swales. Water waste is limited to 2 litres/sec/hectare for a 30-year rainfall return period. • **Biodiversity** has been enhanced by the creation of specific areas to reinforce the ecological continuum in which the secondary school is situated.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• The facility is accessible to people with disabilities. It complies with fire safety regulations.
Respect for fundamental rights	• Combating social, educational and territorial inequalities.
Responsible regional development	• The building has been designed to provide students with the **best possible learning and living environment** (acoustic and thermal comfort, suitable space capacity, etc.). It is therefore part of the development of a quality educational offering in the region, particularly in the **aviation professions**. • The construction of a new **boarding school** facility on the site will also favour broad geographical recruitment.
Regional economic development	• The construction site and the project's operations generate jobs (including a substantial part of local jobs).
Fair practices, responsible purchasing and responsible supplier relations	• Compliance with the criteria/rules of the region and the public procurement code. • Demanding choice of building products and equipment to include bio-sourced materials, resource conservation, reusability, etc.
Promotion of a suitable consultation procedure with internal and external stakeholders	• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region. • Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.

The project website
www.amenagement77.fr/projet/lycee-pierre-de-coubertin/

GENERAL RENOVATION AND ADDITIONS TO THE EVARISTE GALOIS LYCÉE IN SARTROUVILLE (78)

SECONDARY SCHOOL BUILDING CONSTRUCTION AND RENOVATION

PURPOSE

General renovation of the facilities with new capacity for an additional 250 students at the Evariste Galois high school.

LOCATION(S)

Sartrouville (78)

KEY DATES

Preliminary analyses: 2019
Notification of award to the project manager: January 27th 2022
Analyses: 2021 - 2022
Works: 2023 - 2026

TOTAL PROJECT COST

€86.6M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

100%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€10.5M

HISTORY OF PROJECT

Financing by the Region's previous green and sustainable bonds

QUALITATIVE PRESENTATION OF THE PROJECT

- The aim of the project is to **improve the operational organisation** of the school, by providing teaching facilities suited to the teaching on offer (including a half-board facility, science centre, library and courtyard), and to **accommodate the high population density in the area** by increasing the school's capacity by 250 students.
- In addition to demolishing the prefabricated buildings, the project will involve **restructuring the existing buildings** to provide disabled access, ensure fire safety and improve thermal insulation. It will also involve rebuilding a theatre/multi-purpose hall with multiple access for other schools, associations and the local community and will include a redesign of the entrance area.
- The project is part of an effort to make the school more **energy efficient** and **reduce its carbon footprint**. The project is adapted **to climate change** with a design that guarantees hygrothermal comfort for the occupants.
- The new buildings will be **constructed from timber**, meeting a target of 23.79 kg/sq.m of surface area using biobased materials.
- The project is subject to an on-site (mainly furniture) and off-site **re-use strategy** based on a circular economy programme.
- The project has been designed to **limit rainwater run-off** to 5 litres/sec/hectare for a 20-year rainfall event: this water will be managed using retention/infiltration ponds and green roofs.
- In order to **preserve air quality**, all materials used and in contact with the indoor air shall be labelled A+ and the air filtration used must achieve an indoor air quality level of SUP 2.
- The project has been **landscaped to take account of the fauna and flora issues identified** on the site by an ecologist. The planting carried out will bear the "local plant" label.

PROJECT LIFECYCLE

- Work began in 2023 January.
- The **new half-board** facility was handed over in February 2024, its new kitchen in November 2024, et the **new North wing** in December 2023.
- In October 2023, work began on enlarging and **renovating the West wing of the teaching building** and **refurbishing the East and South wings of the teaching building** using a phased approach to keep the wings not under construction operational, supplemented by the addition of modular buildings; The West wing was handed over in November 2024. The other wings will be commissionned for the 2025 school year.
- **Work on Teaching Building E, the reception building, and the renovation of Building A will be completed and handed over in the summer of 2025**, and there will also be interim project deliveries.
- **The sports hall will be handed over in March 2026 et the outsides in May 2026**.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	584	A-2
Number of project beneficiaries	2,170	D-1
CO_2 emissions avoided by the project	92.45 teq CO_2/year	E-4

CATEGORY ELIGIBILITY CRITERIA

• **Renovation: > Reduction in primary energy consumption (PEC) of at least 30%.** • **Construction: Required energy consumption level < -40% compared with RT 2012. (equivalent to level E3C1 of the E+C- Label)**	• For Building A (administration and housing, renovation only), primary energy consumption after renovation is estimated at 100.4 kWhep/sq.m/year, i.e. a reduction of 34% compared to initial consumption (152.8 kWhep/sq.m/year). • For building D (half board, renovation and extension), the primary energy consumption of the renovated part is estimated at 106.4 kWhep/sq.m/year, i.e. a reduction of 45% compared to the initial consumption (193.1 kWhep/sq.m/year). Primary energy consumption in the new section is estimated at 84.0 kWhep/sq.m/year, i.e. 58% less than the maximum consumption calculated under RT2012 standards (198 kWhep/sq.m/year). • For building E (teaching, renovation and extension), the primary energy consumption of the renovated part is estimated at 39.8°kWhep/sq.m/year, a reduction of 61% compared with the initial consumption (101.4°kWhep/sq.m/year). For the new part, primary energy consumption is estimated at 26.6 kWhep/sq.m/year, i.e. 56% less than the maximum consumption calculated by RT2012 regulations (61.7°kWhep/sq.m/year). • For building J (reception, new building), primary energy consumption is estimated at 25.7 kWhep/sq.m/year, i.e. 58% less than the maximum consumption calculated by RT2012 regulations (60.5°kWhep/sq.m/year). • For building K (sports, new building), primary energy consumption is estimated at 53.3 kWhep/sq.m/year, i.e. 50% less than the maximum consumption calculated by RT2012 regulations (106.5°kWhep/sq.m/year).

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, harmful substances, health, etc. (see above).
Combating of climate change and promotion of the region's ecological transition	• The project is part of an effort to reduce the carbon footprint of the facility, with a significant reduction in the energy consumption of new and renovated buildings. The project includes significant proportions of **bio-based materials** in its design, especially for new buildings that will feature a wooden structure.
Contribution to sustainable regional planning and improvement to the quality of life	• Management of rainwater at the plot level through retention/infiltration basins and green roofs. Water waste is limited to 5 litres/sec/hectare for a 10-year rainfall return period. • **Biodiversity** is being developed through a landscaping project that addresses the requirements of the site and is based on the **"local plant" label**.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• The facility is accessible to people with disabilities. It complies with fire safety regulations.
Respect for fundamental rights	• Combating social, educational and regional inequalities
Responsible regional development	• The site has been designed to provide the **best possible learning and living environments** for students in terms of acoustic and thermal comfort, capacity, etc. The project will **improve the functional organisation** of the site, based on a global approach.
Regional economic development	• The construction site and the project's operations **generate jobs** (including a substantial part of local jobs).
Fair practices, responsible purchasing and responsible supplier relations	• Compliance with the criteria/rules of the region and the public procurement code. • Demanding choice of building products and equipment to include bio-sourced materials, resource conservation, **reusability**, etc.
Promotion of a suitable consultation procedure with internal and external stakeholders	• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region. • Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.

The project website
www.idf-constructiondurable.fr/realisations/liste-des-realisations/lycee-evariste-galois-a-satrouville-367

GLOBAL RESTRUCTURING OF EUGÈNE RONCERAY HIGH SCHOOL IN BEZONS (95)

SECONDARY SCHOOL RENOVATION PROJECT

PURPOSE

Total renovation and creation of a boarding school with 100 places.

LOCATION(S)

Bezons (95)

KEY DATES

Project management competition in 2015-2016
Studies in 2017
Calls for tenders for work in 2018
Work in progress since early 2019

TOTAL PROJECT COST

€68.2M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

100%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€7.1M

HISTORY OF PROJECT

Financing by the Region's previous green and sustainable bonds

QUALITATIVE PRESENTATION OF THE PROJECT

- The operation is aimed at the **total redesign** of the site including the restructuring of the main building and its extension, the demolition of the workshops and the accommodation building, the renovation of the sports hall and the **creation of a 100-place boarding school**, a separate day boarding school and a new accommodation building.
- The secondary school site will be comprised of 5 independent establishments separate from a fire safety perspective, on a completely redeveloped plot of land with a new arrangement for the sports field and outdoor areas. The school population will be around 1,048 pupils across 42 classes. The 5 buildings will be identified as follows:
  - → Building A: the education building which will accommodate the general and tertiary/hospitality technological education which will be renovated and extended,
  - → Building B: the day boarding school (new building),
  - → Building C: the boarding school (new building),
  - → Building D: the sports hall (renovation of existing sports hall),
  - → Building E: 10 tied housing units.
- The desired environmental objectives are based on the regional planning tools (green plan, Let's Change the Air plan, etc.) and on the regulations in force.
- The achievement of **energy objectives such as low consumption** in the restructured buildings (80kWh/m² net floor area) and in the new buildings (50kWh/m² net floor area), built on a **comprehensive environmental approach** on the themes of water management, energy, air quality, acoustics and maintenance, make it possible to achieve high standards in terms of **bioclimatic design**.

PROJECT LIFECYCLE

- The work began in early 2019 and the first phases of work have been finalised, notably with the opening of the day boarding school and boarding school to the public for the start of the 2021 academic year and the opening of the building extension in the first half of 2022. The work ended in February 2025.
- Road and utility works are still ongoing, with final completion expected by the start of the 2025 school year.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	370	A-2
Number of project beneficiaries	1,050	D-1
CO_2 emissions avoided by the project	160.5 teq CO_2/year	E-1

CATEGORY ELIGIBILITY CRITERIA

• **Renovation:** **> Reduction in primary energy consumption (PEC) of at least 30%.** • **Construction:** **Required energy consumption level < -40% compared with RT 2012. (equivalent to level E3C1 of the E+C- Label)**	• **New buildings (Extension, Boarding School, Dining Hall, and Housing):** Overall, the primary energy consumption is estimated at approximately **59.3 kWhep/m²/year**, which is **46.5% lower** than the maximum primary energy consumption allowed under the RT2012 regulation (**110.9 kWhep/m²/year**). • **Renovated buildings (General Education and Gymnasium):** The primary energy consumption is reduced to **56.1 kWhep/m²/year** for the main building and **60.7 kWhep/m²/year** for the gymnasium, representing reductions of **64%** and **48%** respectively compared to the reference consumption levels (**157 kWhep/m²/year** and **116 kWhep/m²/year** respectively).

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• Specification defining the **environmental requirements**. • **"Minimal nuisance worksite"** charter: many objectives for limiting nuisances in the environment, with in particular waste traceability and a minimum recovery requirement of 70% by mass (demolition + construction). • Environmental monitoring of each phase by a specialist assistant to the contracting authority.
Combating of climate change and promotion of the region's ecological transition	• **Achievement of the energy objective**: low consumption in the restructured buildings (80kWh/m² net floor area) and in the new buildings (50kWh/m² net floor area). These objectives are designed to reduce greenhouse gas emissions. • The boarding school is equipped with a heat **recovery system in the grey water**. • Limited flows for plumbing facilities (taps, WC, urinals). • **Rainwater recovery** in a 40 m³ tank which can be used to supply over 48% of the daily requirements.
Contribution to sustainable regional planning and improvement to the quality of life	• Installation of an 800-litre **compost** area for the day boarding school. • **Rainwater management on the plot** (presence of ditches, retention basin and infiltration basin). The maximum leakage rate of 2l/s/ha is complied with. • Green roofs implemented. • Large, planted surfaces: the site's edges, car park and private gardens, rustic lawn inside the athletics track. • The species planted will be local (from the Seine Valley) and low-allergenic. • Establishment of **wetlands and dry topographic elevations** on the fitness trail.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• The facility is accessible to people with disabilities. It complies with fire safety regulations.
Respect for fundamental rights	• Combating social, educational and territorial inequalities.
Responsible regional development	• Streams contributing to provide **diversified and quality training** in the region. • Availability of a **boarding school** on the site ensures wide geographical recruitment of pupils.
Regional economic development	• Support for employment during construction, support for integration employment and recruitment of reception, maintenance, catering and accommodation staff within the school.
Fair practices, responsible purchasing and responsible supplier relations	• Compliance with the criteria/rules of the region and the public procurement code. • Strict standards on the choice of construction products and equipment (bio-based materials, lifecycle analysis, etc.).
Promotion of a suitable consultation procedure with internal and external stakeholders	• Information and consultation procedure extended to the entire school community. • Public meetings during the major phases of the operation.

The project website
www.idf-constructiondurable.fr/realisations/liste-des-realisations/lycee-de-bezons-344

CONDORCET CAMPUS AT LA CHAPELLE

HIGHER EDUCATION • NEW PROJECT

PURPOSE

New building.

LOCATION(S)

Paris (75) - Porte de la Chapelle

KEY DATES

Buildings handover: 2025

TOTAL PROJECT COST

€69.7M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

33.3%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€8.7M

QUALITATIVE PRESENTATION OF THE PROJECT

- The building on the La Chapelle site will be dedicated to professional BA and MA courses at Paris 1 Panthéon Sorbonne University in history, philosophy, geography and art history. Approximately 13,000 m² of usable space will be built to accommodate classrooms, university administration offices, student living and documentation premises including a 4,000 m² library for the campus users. 600 m² premises designed to accommodate a student living centre in the City of Paris as well as a 1,100 m² canteen and kitchens managed by CROUS complete this development.
- The total amount of the project is estimated at 69.7 million euros. The financing is provided equally by the three financers, the State, the City of Paris and the Region, at €23M each.
- Worksite in progress.
- Acceptance scheduled for September 2025.

PROJECT LIFECYCLE

- Worksite in progress: Completion of the enclosed covered phase.
- September 2025: Acceptance of buildings and fit-out of outdoor spaces.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	202	A-1
Number of project beneficiaries	3,500	D-1
CO_2 emissions avoided by the project	-	-

CATEGORY ELIGIBILITY CRITERIA

Construction of buildings according to a sustainable development approach, contributing to respect for the environment **Required consumption level < - 20% compared to RT (Thermal Regulations) 2012**	• Cep = 47.90 kWhep/m² gross floor area.year ≤ Cep max = 80.40 kWhep/m² gross floor area.year. • Cep = Cep max - 40.42% and Bbio = Bbio max - 24.32% .CO_2 = 3 kg.CO_2/m²/year ≤ 10 kg.CO_2/m².year. Low energy consumption (40% below RT standards) and low-carbon strategy aiming for E3C1 level ahead of the new RE2020 environmental regulation. A stormwater collection tank is installed for irrigation of green spaces.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• Assistance to the contracting authority to develop and monitor the environmental programme incorporating sustainable development skills and project management specialising in sustainable development. • Environmental quality initiative based on the CERTIVEA reference system for the environmental quality of buildings - "Tertiary Buildings" - September 2011, 2015 version. Dashboard of environmental requirements, derived from a regional sustainable design and construction guide.

Combating of climate change and promotion of the region's ecological transition	• The architectural design of the project gives an important place to the introduction of natural light. The ground floor and garden-level areas contain lots of windows to allow daylight to enter despite the obstructions from tall buildings. • The heat production required for the building's needs: building heating, fresh air heating and ventilation will be provided by a heating substation connected to the local CPCU distribution system. • The installation of dual-flow ventilation helps to limit consumption by recovering heat from the air extracted from the premises to preheat the fresh air. The efficiency of the heat recovery unit will be greater than 80%. • The installation of long balconies on the floors providing access for facade maintenance also function as sunscreens. Setback, the tall patio doors let in natural light without disturbing users. This curtain wall facade consists of an alternating aluminium windows and solid white lacquered Alucobon cladding. In addition to horizontal sun protection, the project provides for the installation of foldable blinds on the facades, integrated within the balcony structure, on the two top floor the building, where the offices are installed. These white lacquered aluminium shutters provide excellent room temperature control in summer, while allowing users to individually adjust the light intensity of the space by getting out onto the balcony. • The use of adiabatic cooling in classrooms, offices and the library helps to cool the blown air while minimising refrigeration compressor use (meeting ozone depletion concerns), thus enhancing summer comfort. • The U-shaped building configuration opens up a vast 1,876 m^2 garden facing south. This large central garden stands in front of the university facade and acts as a transition to the public space. It is a sheltered inner courtyard garden, an interior space to which all the areas of the university open, and also a well landscaped showcase of the school in the public space. It contributes to combating urban heat islands. • More than one-third of the terraces are planted (7,029 m^2 of built ground area for 2,517 m^2 of green terraces in the project) They cannot be accessed for safety reasons: the only outdoor spaces accessible on the upper floors are the elevated, peripheral walkways for teachers and staff on the fourth and fifth floors. • The facade cladding made of white Alucobon composite panels ensures optimum external insulation and controlled installation. The facades thus guarantee a long lifecycle for the building. This is an important point given the proximity of the buildings to the ring road and related pollution. • A 40-cu.m rainwater collection tank is installed in the building basement. It is designed to collect water from inaccessible roofs for reuse in irrigation. • The project uses 11.18 dm^3/m^2 gross floor area of wood through the use of wood for doors, door and window frames, lecture theatre fittings (furniture) and the parquet flooring in the library. Giving a total of approximately 208,730 dm^3 for a floor area of 17,417 m^2. • Waste management charter: quantities produced and collected monitored, sorting according to the types of waste on site, optimised recovery (for at least 70% of waste in relation to the total mass of waste generated) and local channels prioritised (less than 30 km away). • Important public transport hub: metro (lines 12 and 4), various buses (lines 255, 80 and 95) and tram 3b and RER nearby. • The number of bike parking spaces for the project is 63 (which makes a total of 99 spaces with the spaces planned by the Paris Mayor's Office along the Voie Nouvelle).
Contribution to sustainable regional planning and improvement to the quality of life	• The Condorcet campus is a major project to create an internationally renowned City of Humanities and Social Sciences. It helps balance out the education provision in the north of Paris at the Aubervilliers and Porte de la Chapelle campuses. • Through the building architecture, this part of the university campus must also protect student life from the noise and visual pollution at this particularly exposed intersection. Installed along the northern boundary of the plot, the building screens and protects the interior landscape park, the heart of the establishment, from the pollution of the ring-road junction and the Paris Charles-De-Gaulle Express.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• Accessibility regulations taken into account. • Safety study conducted.
Respect for fundamental rights	• Improved working conditions for students and teachers with high-performance workspaces and catering and student living services.
Responsible regional development	• Implementation of professional integration jobs in the operational phase
Regional economic development	• The operation represents 202 jobs for the construction phase.
Fair practices, responsible purchasing and responsible supplier relations	• Requirements on the choice of construction products (reduction in use of natural resources, CO_2 emissions, etc.). • Requirements on the source of materials (limitation of grey energy).
Promotion of a suitable consultation procedure with internal and external stakeholders	• Ensuring that future managers are properly trained by the installer and that an explicit and complete service/maintenance logbook is drawn up Integration of future users as early as possible taken into consideration. Several training sessions will be planned for all technical equipment and more specifically for the centralised technical management. One before the start of operation, one after 6 months and one after one year to ensure proper use of the equipment installed.

the project website
www.pantheonsorbonne.fr/actualite/quatre-questions-dpi-performances-environnementales-centre-chapelle

www.campus-condorcet.fr/fr/le-campus/site-de-paris

ILLUSTRATION BUILDING

HIGHER EDUCATION • NEW PROJECT

PURPOSE
Rehabilitation.

LOCATION(S)
Bobigny (93)

KEY DATES
Programming/consultation studies and designation of the consortium: January 2021 - December 2021
Design surveys: January 2022 - December 2022
Works: Summer 2022 to March 2025
Renovation of Campus outdoor spaces: Subsequent phase (2025 - 2028)

TOTAL PROJECT COST
€27.3M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT
43.96%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND
€7.9M

QUALITATIVE PRESENTATION OF THE PROJECT

- Rehabilitation of part of the Illustration building, notable for its 1930 industrial-era design combining red bricks and a concrete structure and labelled "Heritage of Regional Interest" by the Île-de-France Regional Council.
- Rehabilitation of the connecting strip (Ground floor, R+1, R+2) and the South wing (Hall, R+1, R+2) of the Illustration building in Bobigny:
  - → This is an area of approximately 6,000 m² of floor area (entire Illustration building: surface area = 30,152 m²).
  - → Current scope of rehabilitation of the central wing and the south wing: usable floor area = 4,097 m².
  - → Outdoor areas: 35,000 m².
- Rehabilitation of outdoor spaces:
  - → South Wing surroundings/fire access road.
  - → East/West patios.
- The renovated building now houses:
- tutorial and simulation rooms and laboratories for the IUT, UFR Health, medicine and human biology (SMBH) and Nursing Training Institute (IFSI) facilities;
- Offices for teaching and administrative staff;
- Spaces dedicated to student life: exhibition room, multi-purpose room, music room, association rooms, workspace and social spaces
- The total cost of the operation amounts to 27.9 million euros including tax, financed by:
  - → CPER 2015-2020 €7,500,000.
  - → Recovery plan: €7,998,000 (State).
  - → CPER 2021-2027: €11,000,000 (Region).
  - → Sorbonne University Paris Nord funds €400,000.
  - → Additional financing Region excluding CPER/€1,000,000.

PROJECT LIFECYCLE

- Delivery of the building (southern wing and central wing): March 2025.
- 2025-2028: renovation of outdoor areas.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	50	A-1
Number of project beneficiaries	4,877	D-1
CO_2 emissions avoided by the project	304.2 teq/year	E-1

CATEGORY ELIGIBILITY CRITERIA

Construction of buildings according to a sustainable development approach, contributing to respect for the environment

Required consumption level < - 20% compared to RT (Thermal Regulations) 2012

- Project CEP > Initial CEP -30%
- Initial cep of 284.3 KWhep/m².year
- Project Cep = 58.7 kWhep/m²/year, i.e. savings of -79.35% compared to the maximum cep (Cep RT2012 –79.35%)

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• An environmental engineering consultant is integrated into the design-construction group (S'PACE ENVIRONNEMENT). • Monitoring provided by an energy performance project management assistant (POUGET CONSULTANTS) and an ATMO design office/programming consultant (ARTELIA) An overall cost study was carried out. A schedule for the entire operation was drawn up, including the validation phases by the users of the University, the Local Education Authority and the Region. Validations at each stage of the operation (preliminary design, detailed design, construction, etc.) take place in steering committees, in the presence of the Region. The project is reversible in the sense that the proposed partitioning is traditional, and the structure of the industrial building is preserved. (source document TBACD).
Combating of climate change and promotion of the region's ecological transition	Achieving the energy consumption reduction target will be ensured first and foremost through efficient insulation of the building. The interior of the facade will be insulated with wood wool. The roof insulation will also be reinforced. Linear thermal bridges between the facade and the roof will be minimised thanks to a 1m-wide flocking strip on the underside along the facades of the south wing. The project also includes the creation of a BMS to control the consumption of numerous facilities as required (scheduling, heating management, cooling, ventilation, etc.). For example, lighting in corridors and rooms will be controlled by the BMS according to time slots assigned to the different zones. The offices and classrooms will be manually managed directly by the occupants. The project limits the use of cooling systems to the rooms requiring it, namely certain rooms in the simulation block and the VDI rooms. Concerning water consumption, a precise estimation of actual consumption for all uses (including industrial water needs) of the rehabilitated area was carried out using a dynamic thermal simulation tool as well as the definition of management methods allowing real monitoring and control of comfort and consumption. The aim of the project is to reduce drinking water requirements by aiming for a consumption of 3 m^3 per student per year. For this purpose, hydro-efficient equipment is installed. In addition, the project includes the creation of a rainwater collection tank for irrigation of green spaces. The project incorporates several bio-based materials: wood wool thermal lining; Heraklith wood fibre ceilings; Bio-based linoleum floors; Parquet flooring; Frames and interior doors, pergola of the western facade, structured ceilings and facades of the new interior patios all wood; 98% ALGOPRO algae-based bio-based interior paint. The project will allow significant desealing of the soils, limiting the heat island effect, with a full earth surface area of 1,815 m^2 after the project, compared to 46 m^2 before the project.
Contribution to sustainable regional planning and improvement to the quality of life	• Project with low environmental impact, low-carbon materials and energy, promoting study and research conditions.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• The project meets accessibility standards for people with disabilities. • A mobility study was carried out by the Institut Paris Région.
Respect for fundamental rights	• The project aims to improve access and higher education conditions in the field of health, providing students with comfortable and well-equipped spaces.
Responsible regional development	• The project allows the consolidation of the Sorbonne Paris Nord University Campus in Bobigny, in a less developed area in the field of higher education. It pursues a sustainable approach, limiting its impact on natural resources.
Regional economic development	• In addition, the University's procurement and public contracts department integrates award criteria and social inclusion clauses into various public procurement contracts, in particular those relating to building operation and maintenance and outdoor space upkeep.
Fair practices, responsible purchasing and responsible supplier relations	• A social professional inclusion clause is provided for in the design-construction contract (CCAP 5000 hours). • Requirements on the choice of construction products, to save on natural resources.
Promotion of a suitable consultation procedure with internal and external stakeholders	• Consultations with future users from the study phase, in particular the Nursing Care Training Institutes (IFSI).

© Région Ile de France Stephane Asseline

The project website
www.epaurif.fr/tous-nos-projets/rehabilitation-du-batiment-de-lillustration/

REHABILITATION AND REDEVELOPMENT OF THE BREGUET BUILDING

HIGHER EDUCATION • NEW PROJECT

PURPOSE

Building renovation.

LOCATION(S)

Paris Saclay - Supelec Power Station - Gif-sur-Yvette (91)

KEY DATES

Ground broken: 28 november 2024
Delivery in 2027

TOTAL PROJECT COST

€83M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

42.17%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€5.6M

QUALITATIVE PRESENTATION OF THE PROJECT

- Inaugurated in 1975 (architects Michel Longuet and Michel Herbert), this building comprises more than 37,700 m² for renovation (usable area of 28,425 m²).
- The aim of the project is to create the conditions for an **ecosystem of excellence in scientific and economic cooperation**. Around common premises fitted out to promote meetings and cooperation, the building will host teaching and research activities, as well as activities around innovation, entrepreneurship and industry. It will also host the headquarters of the University of Paris-Saclay and the administration and governance of public and private structures. It entails shifting evolving working, teaching, research and innovation practices towards greater openness and interdisciplinarity; and promoting collaboration, exchange and cooperation between the worlds of education, research and entrepreneurship.
- **The project developed by the Patriarch group proposes two major interventions:**
  - → The complete refurbishment of the main entrance and the treatment of the large, glazed facade to improve the visibility of accesses.
  - → The development of a central volume open on several levels, called the "core volume", in which a wide variety of spaces and services can be found (cafeteria, hot desks, meeting rooms, spaces reserved for companies, etc.).
- **Environmental profile**
- Application of the Sustainable Development and Construction Guide and:
  - → HQE Sustainable Building certification ("Excellent" level);
  - → 2021 BBC Effinergie Renovation label;
  - → BBCA Renovation label ("Performance" level);
  - → BiodiverCity label ("very high performance" level).
- **Compared to the existing one:**
  - → A compact thermal envelope and a more efficient ventilation system to reduce utilities consumption.
  - → A more virtuous way of producing heat than current electrical systems.
  - → A rooftop photovoltaic system enabling self-consumption of the electricity produced.

PROJECT LIFECYCLE

- Progression:
  - → The building permit was issued.
  - → Asbestos removal and cleaning completed in August 2024.
- Major rehabilitation work started in September 2024:
  - → Demolitions are complete, frames removed and reused.
  - → Reinforcement of the foundations using micropiles carried out.
  - → Complete prototype of a facade element on a corner of the building with different glazing and cleaning of the panels.
  - → The control rooms were completed at the end of January 2025.
  - → Scheduled delivery July 2026.
  - → HQE audit: achievement of excellent level at this stage is confirmed.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	300	A-1
Number of project beneficiaries	5,400	D-8
CO_2 emissions avoided by the project	-	-

CATEGORY ELIGIBILITY CRITERIA

Renovation of buildings according to a sustainable development approach, contributing to respect for the environment **Primary energy consumption reduction level (Cep) of at least 30% (Cepproject ≤ Cepinitial - 30%**	An environmental engineering consultant is integrated into the design-build consortium and monitoring is ensured by an energy performance project management assistant. Work on the existing envelope and production sources will improve performance with respect to energy and environmental goals: • TotalenergybalancePROphase:2,500MWh/year,i.e.*38%comparedtoexistingconditions. **Target total energy balance operating phase 2000MWh/year i.e. -50%/existing conditions.** • Energy targets applied to the operation: BBC Effinergie renovation (40% final energy savings target between the project CEP and the reference CEP) **Target met: CEP ref -68.9%**.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• Assistance to the contracting authority to develop and monitor the environmental programme from planning up to 1 year after the handover of the building. • Competent project management in a sustainable environment. • Environmental programme prioritising a passive approach to meet needs naturally. • HQE Sustainable Building certification ("Excellent" level).
Combating of climate change and promotion of the region's ecological transition	• Rehabilitating the existing building is more environmentally sound than demolishing the building and rebuilding it. Almost all structural elements are preserved or reused, in particular the frames. • Total energy balance PRO phase 2,500 MWh/year i.e. - 38% compared to existing conditions. • Expanded energy commitment 2,000 MWh/year* i.e. -50% compared to existing conditions. • **HQE audit: achievement of excellent level at this stage is confirmed.**
Contribution to sustainable regional planning and improvement to the quality of life	• The aim of the project, in addition to having an impact on the Moulon district, is to contribute more widely to the economic, societal and cultural dynamics of the Saclay Plateau. • Creation of a new public space and a main entrance forecourt connected to the public space and neighbouring buildings. This forecourt is directly connected to the heart of the establishment.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• PRM regulations taken into account. • Safety study conducted.
Respect for fundamental rights	• Improved working conditions for PhD students and researchers by offering them comfortable and practical workspaces and assembling the research laboratory teams under one roof.
Responsible regional development	• Creation of jobs for people facing employment barriers in the operations phase.
Regional economic development	• 80% of the companies involved in the project are based locally (department where project is located and neighbouring departments). • Building of housing, local services and several catering services around the project.
Fair practices, responsible purchasing and responsible supplier relations	• Requirements on the choice of construction products (reduction in use of natural resources, CO_2 emissions, etc.). • Requirements on the source of materials (limitation of grey energy).
Promotion of a suitable consultation procedure with internal and external stakeholders	• Consultation with laboratories for program validation: Personal notebook, user awareness, eco-gestures Creation of a building usage and maintenance logbook.

© DR. Patriarche

The project website
https://mycs.centralesupelec.fr/fr/grands-travaux

©Julien Pebrel-Myop

CLEAN TRANSPORTATION

Development of public transport services contributing to sustainable mobility and the fight against climate change, along with projects aimed at improving user comfort, accessibility, and safety for both passengers and residents living near transport infrastructure.

- **As the lead authority for transport in Île-de-France**, the Region contributes to the definition of transport planning frameworks with Île-de-France Mobilités, the mobility organizing authority in Île-de-France, and co-finances major investment projects with its partners (such as the State and the departmental councils).
- **Extension of the RER EOLE (Line E) to western Île-de-France:** this project will enable a new East-West connection across the region, passing through La Défense and Saint-Lazare.
- **Another major flagship project:** the creation of the first urban cable car (Câble 1) between the cities of Villeneuve-Saint-Georges and Créteil.
- **Development or improvement of dedicated bus lanes:** also financed through green and responsible bonds, these projects help reduce congestion on roadways.
- **Regional jurisdiction:** mandatory.
- **Form of intervention:** grants to project owners (Île-de-France Mobilités, RATP, SNCF, departmental councils).
- **Target audience:** all residents of Île-de-France.

SUBWAY LINE 11

CLEAN TRANSPORTATION / SUBWAY

PURPOSE

Extension to Rosny-Bois-Perrier.

LOCATION(S)

Paris, Les Lilas, Romainville, Noisy-le-Sec, Rosny-sous-Bois

KEY DATES

Start of preparatory work: 2016
Commissioning: June 2024

TOTAL PROJECT COST

€1,298M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

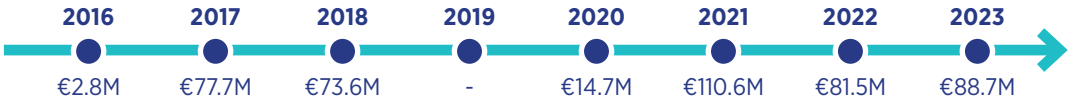
42.9%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€22.7M

HISTORY OF PROJECT

Financing by the Region's previous green and sustainable bonds



QUALITATIVE PRESENTATION OF THE PROJECT

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

PROJECT LIFECYCLE

- Several projects are underway between Châtelet and Rosny-Bois-Perrier, both on the adaptation of existing stations and on that of extension works. The work is nearing completion.
- The line was inaugurated on June 13, 2024. Final adjustments and issue resolution are in progress.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	9,216	A–2
Number of project beneficiaries	331,000	D–4
CO_2 emissions avoided by the project	3,255 teq CO_2/year	E–3

CATEGORY ELIGIBILITY CRITERIA

Construction of rail transport infrastructure meeting the following criterion	**Construction of rail transport infrastructure meeting the following criterion:** trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling and trackside control-command and signalling subsystems • Extension of metro line 11 to Rosny-Bois-Perrier. • Electrified infrastructure on the ground.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• RATP, the project owner, is involved in its sustainable development policy by managing the environmental risks of its industrial sites (e.g. on the future site of maintenance and storage: treatment of polluted land) and the infrastructure It operates, through the eco-design of the infrastructure, systems, and equipment, which it specifies or designs, and through the purchases it makes.
Combating climate change, and promoting the Region's environmental transition	• 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 CO_2 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, considering the time saved by other users and that due to the better station accessibility, the annual time savings amount to 4 million hours per year.
Socially inclusive development, combating inequality, and promoting the safety of individuals	• New stations accessible to Persons with Reduced Mobility (PRM): access routes within the station, from the street to the platforms, will be made accessible via elevators, following the main access path. Platforms will always be straight-aligned to allow level boarding onto trains. • Integration of the project into the fare system in Île-de-France: the project will be incorporated into the fare system set by Île-de-France Mobilités, which includes a social pricing scheme funded by the Region to ensure access to mobility and public transport for the most disadvantaged.
Respect for fundamental rights	• Respect for the fundamental rights of workers who work on the site, by ensuring their safety and by respecting the legislation for the health protection.
Regional responsible 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 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 Île-de-France.
Fair practices, responsible purchasing, and responsible supplier relations	• Within the framework of the projects supported by the Region, the grants awarded to the contracting authorities (the RATP for this project) are subject to the Public Procurement Code.
Promotion of a suitable consultation procedure with internal and external stakeholders	• Regular information given to residents on the evolution of the stages of the site. • Specific information campaigns will also be put in place among elected representatives, associations, residents near the building site and passengers of the metro and bus networks. • Local agents accompany the construction site on the field, liaising between residents, elected representatives and construction companies (office hours in a dedicated space, "site info" phone number). • A dedicated online portal will be put in place.

©Agnes Dherbeys-Myop

The project website
www.ratp.fr/groupe-ratp/metro-ferre/prolongement-de-la-ligne-11-a-rosny-bois-perrier

The project website
https://www.iledefrance-mobilites.fr/le-reseau/projets/metro-11-prolongement-mairie-des-lilas-rosny-bois-perrier

EXTENSION OF T1 TO THE EAST, FROM BOBIGNY-PABLO PICASSO TO VAL-DE-FONTENAY

LOW-CARBON TRANSPORT / TRAMWAY • NEW PROJECT

PURPOSE

The extension of T1 to the east meets two objectives:
1 - a transport objective seeking to improve the public transport service and network in eastern Greater Paris, and in particular Seine-Saint-Denis, by improving connectivity for poorly served areas;
2 - a development objective aimed at enhancing public space and supporting urban projects in the east of Paris.

LOCATION(S)

Bobigny, Noisy-le-Sec, Romainville, Montreuil, Rosny-sous-Bois, Fontenay-sous-Bois

KEY DATES

Commencement of work: 2020
Commissioning: 2030

TOTAL PROJECT COST

Target cost: €485.4M constant euros 01/2011

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

57.74%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€42.7M

QUALITATIVE PRESENTATION OF THE PROJECT

- Extension of line T1 between Noisy-le-Sec and Val-de-Fontenay (7.7 km of new track) as well as the creation of new stations and terminus (15 new stations in total).
- Full redevelopment of public spaces along the route of the extension and the associated land acquisitions.
- Creation of a regulation station at Bobigny-Pablo Picasso and redevelopment of the stations and the existing route between Bobigny-Pablo Picasso and the Noisy-le-Sec RER station (6 stations refurbished).
- Reconfiguration of Avenue Gallieni in Noisy-le-Sec and installation of bike lanes.
- Creation of the maintenance and storage depot.
- Removal of the A196 and conversion into a landscaped avenue.
- Construction of an A86 crossing structure and reconfiguration of the access roads in Romainville, and construction of a crossing structure in Fontenay-sous-Bois.
- Renovation of the pedestrian crossing in Val de Fontenay.
- Partners involved: project owners (Seine-Saint-Denis Department and RATP) and other co-financers (State, Region, Val-de-Marne Department).

PROJECT LIFECYCLE

- The surveys took place from 2012 to 2020.
- Work began in early 2020.
- Work is scheduled to be completed in 2029.
- Commissioning planned for 2030.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	-	-
Number of project beneficiaries	46,000	D-4
CO_2 emissions avoided by the project	-	-

CATEGORY ELIGIBILITY CRITERIA

Construction of rail transport infrastructure meeting the following criterion: trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board, control-command and signalling and trackside control-command and signalling subsystems	**Construction of infrastructure for rail transport: low-carbon tramway** for public passenger service. • Extension of the T1 line which consists of the creation of 7.7 km of new tracks, a maintenance and storage depot and the takeover of 6 existing stations. • Infrastructure for low-carbon public transport. • Ground electrified infrastructure.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

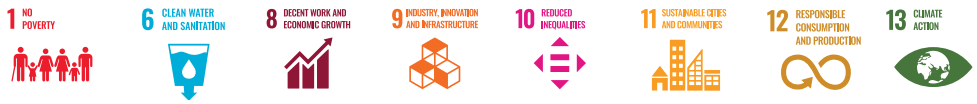
Environmental management and eco-design of projects	• Consideration of ecological issues (noise, air, water, and biodiversity with, for example, the replacement of impacted trees).
Combating climate change, and promoting the Region's environmental transition	• Project promoting the continuity of soft mobility and freeing itself from road congestion constraints responsible for major service irregularity problems, to offer a real alternative to car use. • The project to extend the T1 line to the east will only require the very limited use of natural spaces likely to be a habitat for protected species. The project's impact assessment concludes that there is no residual impact on the natural environment, after the prevention and reduction measures have been implemented • Absence of wetlands in the project scope.
Sustainable regional planning and improving quality of life	• The route of the T1 extension to the east traverses a dense and highly heterogeneous urban fabric, not only in terms of building typology but also in terms of its quality. The project is an opportunity to renew ageing plant structures (an additional 500 trees), restore an urban language on a more human scale, reconstruct fringes and enhance views. • Implementation of comfortable public space improvements prioritising soft mobility and pedestrians: pedestrian connections, comfortable pavements, replanting and parking provision.
Socially inclusive development, combating inequality, and promoting the safety of individuals	• This project promotes the improved accessibility of the region and is fully invested in efforts to combat regional inequalities. • 100% of stations will be accessible.
Respect for fundamental rights	• By promoting intermodal transport and improved regional connectivity, this project promotes freedom of movement.
Regional responsible development	• Increasing the attractiveness of this area promotes its economic development. • This project reinforces and develops intermodality with existing (RER E at Noisy-le-Sec and Val de Fontenay stations, RER A at Val de Fontenay, metro lines 5 and 11 at Bobigny Pablo-Picasso) and planned transport lines (lines 18 and 15 of the Paris Express at Pont de Bondy and Rosny-sous-Bois, Tzen3, T11).
Regional economic development	• The project is a catalyst for the development of the area, by improving accessibility for poorly connected neighbourhoods and strengthening the attractiveness of the region served and more broadly all the municipalities concerned by the project. • Employment support linked to construction work: in 2025, the population of the municipalities concerned is around 426,000 people for 166,100 jobs.
Fair practices, responsible purchasing, and responsible supplier relations	• Regional grants issued to the Department of Seine-Saint-Denis and RATP, contracting authorities, themselves subject to the French Public Procurement Code.
Promotion of a suitable consultation procedure with internal and external stakeholders	• The preliminary consultation was organised from 2001 to 2009 and in particular confirmed the continuation of the project and the service to the city centre of Noisy-le-Sec. • The public enquiry took place from 27 June to 31 July 2013 and the project was declared of public utility on the 17th of February 2014. • Numerous exchanges with local stakeholders (public meetings) as part of the project management helped develop the project (choice of the final route in Noisy-le-Sec).

©Brice Perrin-Île-de-France Mobilités

The project website
www.iledefrance-mobilites.fr/le-reseau/projets/tram-t1-valdefontenay

TRAMWAY T12

CLEAN TRANSPORTATION / TRAMWAY



PURPOSE

T12 between Massy-Palaiseau and Évry-Courcouronnes.

LOCATION(S)

Massy, Palaiseau, Champlan, Longjumeau, Chilly-Mazarin, Épinay-sur-Orge, Savigny-sur-Orge, Morsang-sur-Orge, Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Évry

KEY DATES

Start of work: 2017
Commercial commissiong: December 10th, 2023

TOTAL PROJECT COST

€526M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

55.8%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€30.7M

HISTORY OF PROJECT

Financing by the Region's previous green and sustainable bonds

QUALITATIVE PRESENTATION OF THE PROJECT

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

PROJECT LIFECYCLE

- Start of work: 2017.
- Resumption of trainset deliveries: March 2023.
- Start of dynamic testing: end of April 2023.
- Commercial commissioning: December 10, 2023.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	4,095	A-2
Number of project beneficiaries	40,000	D-5
CO_2 emissions avoided by the project	2,534 teq CO_2/year	E-3

CATEGORY ELIGIBILITY CRITERIA

Construction of rail transport infrastructure	**Construction of rail transport infrastructure** meeting the following criterion: trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling and trackside control-command and signalling subsystems. • T12: creation of a new tramway line between the municipalities of Massy-Palaiseau and Evry-Courcouronnes. • Electrified infrastructure on the ground.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION	
Environmental management and eco-design of projects	• The SNCF, the project owner, is committed 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 teqCO_2 per year.
Sustainable regional planning and improving quality of life	• The new line will improve the quality of life of users in the Île-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 Île-de-France, set by Île-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.
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.
Regional responsible 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 Île-de-France Mobilités, SNCF Voyageurs and SNCF Réseau, who are subject to the Public Procurement Code.
Promotion of a suitable consultation procedure with internal and external stakeholders	• Prior consultation was organised between May and July 2009. • 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.

The project website
https://www.iledefrance-mobilites.fr/le-reseau/projets/tram-12-nouvelle-ligne-de-tram-massy-evry-courcouronnes

EOLE

CLEAN TRANSPORTATION/RAILWAY LINKS

PURPOSE

Western extension of the RER E.

LOCATION(S)

Paris, Courbevoie, Nanterre, Houilles, Carrières-sur-Seine, Poissy, Villennes-sur-Seine, Les Mureaux, Aubergenville, Épône, Mézières, Mantes-la-Jolie

KEY DATES

Start of work: 2017
Commissioning up to Nanterre-La-Folie: mid-2023
Full commissioning to Mantes-La-Jolie: 2027

TOTAL PROJECT COST

€5,429M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

28.3%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€328.9M

HISTORY OF PROJECT

Financing by the Region's previous green and sustainable bonds

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

PROJECT LIFECYCLE

- The construction work on the new section between Haussmann St Lazare and Nanterre La Folie (creation of 3 new stations, and an 8 km tunnel) has been completed. The EOLE extension was officially commissioned up to Nanterre-la-Folie in December 2024.
- Continuation of work on the existing section: work on the Bezons viaduct, Mantes triangle, 3rd track, existing stations (Haussmann St-Lazare, Magenta, Epône-Mézières and Les Mureaux).
- The commissioning of the extension to Mantes-la-Jolie station is scheduled for early 2027 without Nexteo, and by the end of 2029 with Nexteo.

IMPACT INDICATORS RELATING TO THE PROJECT

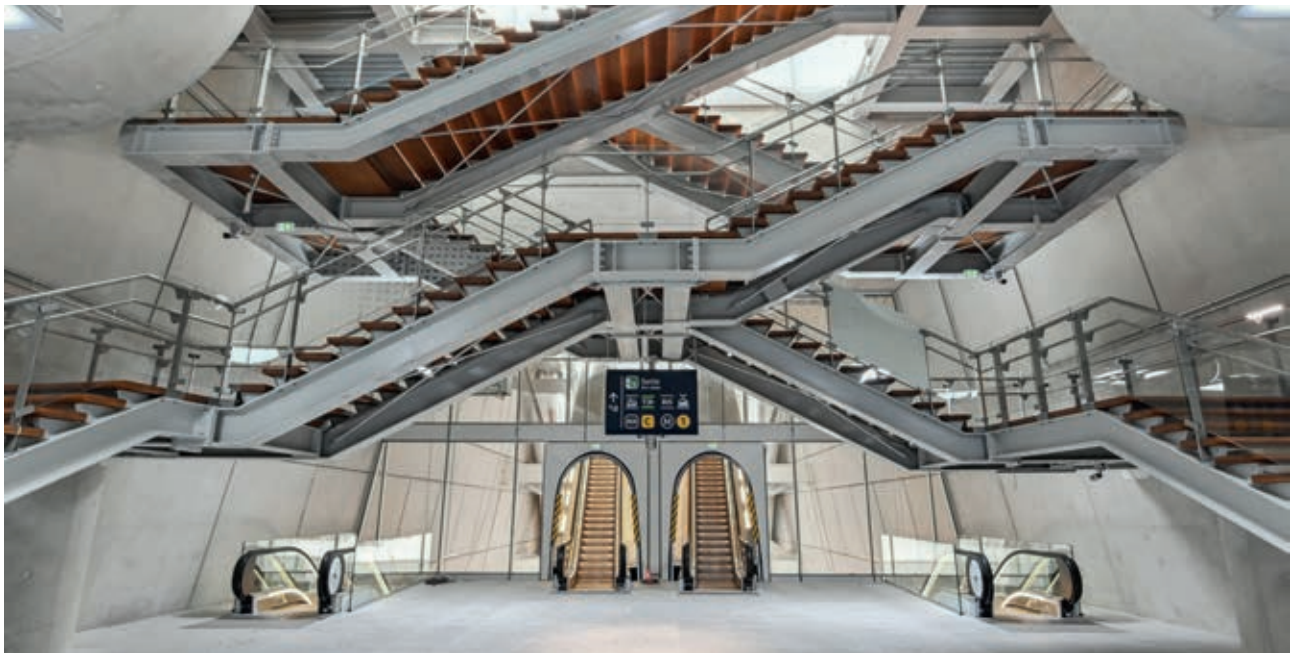
Indicator	Impact	Methodological note
FTE supported by the project	26,554	A–2
Number of project beneficiaries	1,400,000	D–4
CO_2 emissions avoided by the project	8,040 teq CO_2/year	E–3

CATEGORY ELIGIBILITY CRITERIA

Construction of rail transport infrastructure	**Construction of rail transport infrastructure** meeting the following criterion: trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling and trackside control-command and signalling subsystems. • Extension of the RER E line between Paris and Mantes-la-Jolie. • Electrified infrastructure on the ground.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• 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 shift from road to rail, of 8,040 teqCO_2 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 the opening up of the territory and is fully in line with a desire to fight against inequalities between territories. • Project management requires companies to entrust a minimum number of working hours to people who are far from employment, to train and support them in order to promote their access to sustainable employment and reintegrate them permanently into the job market. • •1,385,000 hours of professional integration between 2016 and March 2023.
Respect for fundamental rights	• By promoting intermodality and better service in the region, this project promotes the right to come and go.
Regional responsible 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.
Promotion of a suitable consultation procedure with internal and external 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.

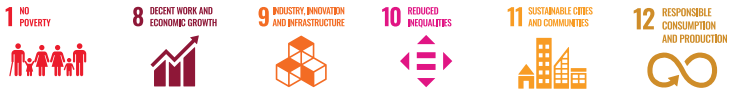


The project website
www.rer-eole.fr

The project website
https://www.rer-eole.fr/les-grandes-etapes-du-projet-eole/

TZEN 4

CLEAN TRANSPORTATION/ SCHEME : DEVELOPMENT FOR BUSES ON OWN SITES AND LAYOUT OF ROADWAYS



PURPOSE

New bus line between Viry-Châtillon and Corbeil-Essonnes.

LOCATION(S)

Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Évry, Corbeil-Essonnes

KEY DATES

Start of work: 2021

TOTAL PROJECT COST

€124.0M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

49%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€24.3M

HISTORY OF PROJECT

Financing by the Region's previous green and sustainable bonds

QUALITATIVE PRESENTATION OF THE PROJECT

- **The TZEN 4 project consists in creating a public transport infrastructure on a clean site between Viry-Châtillon and Corbeil-Essonnes.** It will replace the current 402 line on the section between "La Treille" at Viry-Châtillon and the RER D station at Corbeil-Essonnes, mainly by integrating the existing section. The infrastructure will extend on about 14,3 km and serve 30 stations with a frequency of 4 minutes during rush hours.
- When commissioned, the TZEN 4 will also borrow clean site sections constructed as part of the urban projects crossed (Grande Borne and ZAC Centre-Ville at Grigny and ZAC de la Montagne des Glaises at Corbeil-Essonnes).
- The TZEN 4 **will also be part of the urban projects of the priority neighbourhoods identified in the New National Urban Renewal Program (NPNRU).** Several districts of national or regional interest will be served directly by the TZEN 4 (Tarterêts at Corbeil-Essonnes, Pyramides at Evry, Plateau at Ris-Orangis, Grigny 2 and La Grande Borne at Grigny, Plateau at Viry-Châtillon) thus contributing to limiting their isolation from the territory and its economic dynamics. The success of the TZEN 4 project in these neighbourhoods is a priority for the Region. It has chosen to invest specifically in the project through a framework policy, which was passed on 26 January 2017 (CR n°2017-06).
- For the TZEN 4, Île-de-France Mobilités has chosen 24-metre long buses that are fully electric and 100% accessible to people with reduced mobility. However, the purchase of the buses will be covered by Île-de-France Mobilités, while the Île-de-France Region finances the maintenance and storage site and its equipment with electric charging stations.
- Part Partners involved: Île-de-France Mobilités project management and other funders (State and Department of Essonne).

PROJECT LIFECYCLE

- The work on routing the concessionaires has been completed.
- Work on the platform began in January 2023 and work on the first stations began in March 2023. Completion is scheduled for January to the first semester of 2024.
- Additional work to reinforce the slab of the parking lot at the South Île-de-France Hospital Center had to be added to the project to accommodate buses.
- The completion of the work is scheduled for the end of 2025.
- Construction of the maintenance and storage site (SMR) began in September 2021 and was completed in June 2023.
- The delivery of the bi-articulated electric buses was delayed due to the manufacturer's bankruptcy at the end of 2025.
- Commissioning is scheduled for the first quarter of 2026.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	880	A-2
Number of project beneficiaries	47,000	D-6
CO_2 emissions avoided by the project	-	-

CATEGORY ELIGIBILITY CRITERIA	
Construction of rail transport infrastructure	**Construction of infrastructure enabling low-carbon road transport** dedicated to public passenger transport. • Creation of a new bus line between Viry-Châtillon and Corbeil-Essonnes. On 11/10/2021, the Board of Directors of IDFM presented the choice validated in CAD: the TZEN 4 buses will be articulated vehicles of 24m, 100 % electric. • Infrastructure enabling low-carbon road transport.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION	
Environmental management and eco-design of projects	• Consideration for environmental issues (noise, air, water, biodiversity), e.g. restitution of impacted trees.
Combating climate change, and promoting the Region's environmental transition	• The project promotes the continuity of soft mobility. Thanks to its own sites, it also frees itself from the constraints of traffic congestion responsible for major irregularity issues so that it provides a real alternative to the use of the car. • The TZen 4 project requires only very limited consumption of natural areas likely to house protected species. The impact study of the project concludes that there is no residual impact on the natural environment, after the implementation of avoidance and reduction measures. • No wetlands in the project area. • The bus acquired by Île-de-France Mobilités will be electric.
Sustainable regional planning and improving quality of life	• The layout of the TZEN 4 crosses a dense and heterogeneous urban fabric, not only considering the typology of constructions but also with regard to their quality. The project is an opportunity to renew aging plant structures, restore a more human-scale urban language, restore fringes and enhance perspectives. • Setting up of comfortable public spaces, which favour the soft and pedestrian mode: pedestrian continuity, large pavements, restitution of plantations and parking.
Socially inclusive development, combating inequality, and promoting the safety of individuals	• This project promotes the opening up of the territory and fully subscribes to an effort to fight against inequalities between territories. Île-de-France Mobilités has selected 24-metre-long buses, which will have full disabled access.
Respect for fundamental rights	• By promoting intermodality and a better coverage of the territory, this project promotes the right to come and go.
Regional responsible development	• Strengthening the attractiveness of this sector promotes its economic development. • Upgrade the 402 line towards a more efficient mode between the "La Treille" station at Viry-Châtillon and the Corbeil-Essonnes RER station. • Consolidate and develop intermodality with existing (RER D, TZEN 1) and planned (Tram-Train 12 Express) transport lines.
Regional economic development	• The project is a catalyst for the development of the sector, by opening up poorly connected neighbourhoods and increasing the attractiveness of the served corridor, and more broadly to all municipalities concerned by the project. • Support for works-related jobs.
Fair practices, responsible purchasing, and responsible supplier relations	• Subsidies from the Region granted to the actual project owners subject to the Code des Marchés Publics (public procurement code).
Promotion of a suitable consultation procedure with internal and external stakeholders	• Prior consultation from 17 October 2010 to 2 December 2011, which defined the insertion according to the layout and location of the Maintenance and Storage Site (SMR). • Public survey from 30 May to 4 July 2016. • Statement of public utility on 8 December 2016. • Numerous exchanges with the local players as part of the project management, which made it possible to develop the project (layout, stations, SMR, etc.).

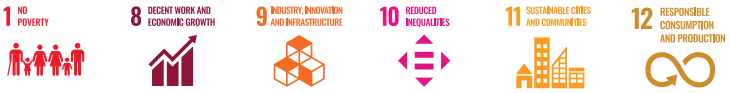
The project website
www.iledefrance-mobilites.fr/le-reseau/projets/tzen4

The project website
https://www.iledefrance-mobilites.fr/medias/portail-idfm-projets/e6b3d66b-81c6-457a-9e87-aed43bf8a3cb_Tzen-4-De%CC%81pliant-projet.pdf

The project website
https://www.iledefrance-mobilites.fr/actualites/locales/detail/info_travaux_tzen4

CABLE 1

LOW-CARBON TRANSPORT/URBAN CABLE CAR • NEW PROJECT



PURPOSE

Urban cable car between Créteil and Villeneuve-Saint-Georges.

LOCATION(S)

Créteil, Valenton, Limeil-Brévannes, Villeneuve-Saint-Georges

KEY DATES

Commencement of work: 2022

TOTAL PROJECT COST

€140.0M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

49%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€9.6M

QUALITATIVE PRESENTATION OF THE PROJECT

- The Cable 1 project involves **creating an urban cable car along a 4.5 km line that will directly connect the towns of Villeneuve-Saint-Georges, Limeil-Brévannes and Valenton to Créteil - Pointe du Lac on Metro line 8.**
- This infrastructure **will serve 5 stations** spaced between 500 and 1,800 metres apart with a stop frequency of less than 30 seconds at peak times.
- From the Créteil - Pointe du Lac station which is a **direct interconnection with the Metro 8 terminus station**, the project will serve Limeil-Brévannes station located in an area under development in the town, Valenton station located at the heart of the "Végétale" green way, La Végétale station also located at the heart of this green space within the borders of Limeil-Brévannes, and finally the Villa Nova terminus station located in Villeneuve-Saint-Georges in the Bois Matar district.
- Stations and **10-seater** cable cars **will be fully accessible to people with reduced mobility**.
- This region is particularly hilly and has numerous urban intersections (freight and TGV lines, major roadways and the Seine). This public transport project on its own dedicated right-of-way will therefore be able to serve many neighbourhoods south of Créteil at the interface between the heart of the urban agglomeration, very densely populated and well served by public transport, and spaces that are becoming denser like the Villeneuve plateau in the south of the Val-de-Marne Department.
- Partners involved: Île-de-France Mobilités (contracting authority) and other financers (State and Val-de-Marne Department).

PROJECT LIFECYCLE

- The five stations have been completed.
- The cable is installed across all sections and the 30 pylons have been erected.
- Start-up of the line and installation of the cable cars in early 2025.
- Continuation of the road and parking works (short-term drop-off area for Limeil-Brévannes station and access route to the technical rooms of the Créteil - Pointe du Lac station).
- Testing and empty running during the second half of 2025.
- The work will be fully completed in spring 2026 with the last tree plantations at La Végétale station.
- Commissioning of the infrastructure planned for December 2025.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	-	-
Number of project beneficiaries	3,200,000	D-5
CO_2 emissions avoided by the project	-	-

CATEGORY ELIGIBILITY CRITERIA

Construction of public cable car transport infrastructure	**Construction of infrastructure supporting low-carbon cable transport** for public passenger transport. • Creation of an urban cable car between Créteil (Val-de-Marne - 94) and Villeneuve-Saint-Georges (Val-de-Marne - 94). • Infrastructure to provide low-carbon transport.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION	
Environmental management and eco-design of projects	• Consideration of ecological issues (noise, air, water, and biodiversity with, for example, the replacement of impacted trees).
Combating climate change, and promoting the Region's environmental transition	• Project to overcome road traffic congestion constraints responsible for major reliability problems, offering a real alternative to car travel. • The intermodality offered at each station (access to the simplified bus network, pedestrian and cycling facilities, etc.) will promote the use of soft mobility. • The limited scope of the project's land footprint helps minimise impacts on local biodiversity. • The fly-over path of the cable above the La Végétale green way and Parc Saint-Martin has been elevated to preserve as many trees as possible.
Contribution to sustainable regional planning and improvement to the quality of life	• The project will ease transportation in a highly constrained area defined by challenging terrain and multiple urban divides. • Implementation of comfortable public space designs, which favour soft mobility: continuous pedestrian and cycling routes.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• This project thus promotes connectivity in the region and is fully invested in efforts to combat inequalities between regions. • Stations and cable cars will be 100% accessible to people with reduced mobility.
Respect for fundamental rights	• By promoting intermodal transport and improved regional connectivity, this project promotes freedom of movement.
Regional responsible development	• Increasing the attractiveness of this area promotes its economic development. • Improving efficiency of line 402 between La Treille station in Viry-Châtillon and Corbeil-Essonnes RER station. • Reinforcing and developing intermodality with existing transport lines (metro line 8).
Regional economic development	• The project is a catalyst for the development of the area, by improving connectivity for poorly connected neighbourhoods and increasing the attractiveness of the towns served by the infrastructure project. • More jobs created by the project.
Fair practices, responsible purchasing, and responsible supplier relations	• Regional grants issued to contracting authorities, themselves subject to the French Public Procurement Code.
Promotion of a suitable consultation procedure with internal and external stakeholders	• Review of the public consultation approved on 22 March 2017. • Public survey from 25 March 2019 to 11 May 2019. • Declaration of public interest on 22 October 2019. • Numerous exchanges with local stakeholders as part of project management, which helped develop the project.

The project website
www.iledefrance-mobilites.fr/le-reseau/projets/cablec1

©Michel Slomka-Myop

RENEWABLE ENERGY

Projects contributing to the development of renewable energy and energy efficiency

***In order to strengthen its action for the energy transition**, the Region adopted the Energy-Climate Plan* in 2018 and aims to fully assume its leadership role in energy, air quality, and climate. The Region's ambition is to halve Île-de-France's dependence on fossil fuels and nuclear energy by 2030, and to move towards a 100% renewable and zero-carbon region by 2050, through a 40% reduction in regional energy consumption and a fourfold increase in the amount of renewable energy produced locally.

This strategy focuses on several renewable energy sources with strong development potential in Île-de-France, particularly district heating networks, solar energy, hydrogen, and methanation. Its implementation continues with determination by accelerating the development of hydrogen mobility, solar photovoltaics, and methanation through ambitious and operational plans adopted at the end of 2019 (Solar, Hydrogen, and Methanation Plans).

The Region also relies on geothermal energy, an economical and highly exploitable renewable source in Île-de-France, which currently supplies over 150,000 housing equivalents (around 330,000 people). To accelerate the deployment of deep geothermal energy, the Region, together with ADEME and the French Geological Survey (BRGM), launched the exploratory program Géoscan Île-de-France in early 2024.

- **Regional jurisdiction:** shared with all public stakeholders in the region.
- **Form of intervention:** territorial actions aimed at integrating environmental policies into land-use planning projects; grants to local authorities leading the projects.
- **Target audience:** all residents of Île-de-France.

UNIGEO GEOTHERMAL HEATING NETWORK

RENEWABLE ENERGY PRODUCTION AND DISTRIBUTION • NEW PROJECT

PURPOSE

Creation of a geothermal heating network in the municipalities of Pantin, Les Lilas, Le Pré-Saint-Gervais (93).

LOCATION(S)

Pantin, Les Lilas, Le Pré-Saint-Gervais (93)

KEY DATES

Deep geothermal drilling carried out
between July 2023 and March 2024.
Heating network development
between summer 2023 and autumn 2025.

TOTAL PROJECT COST

€79.3M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

10.09%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€3.8M

QUALITATIVE PRESENTATION OF THE PROJECT

- The project consists of **creating a renewable heat network powered by two geothermal doublets and extended to the municipalities of Pantin, Lilas and Pré-Saint Gervais (93)**. The local public company UniGeo (100% public) responsible for the management and operation of energy production and the heat network.
- The two geothermal doublets are located in the municipality of Lilas and draw from the Dogger aquifer at a depth of 1,800 metres.
- **The main beneficiaries of renewable heat are social housing, co-ownership properties and public buildings (school complexes, town halls, high school, swimming pool, etc.)**. 63% of the heating needs covered by the heating network are located in Pantin, 21% in Lilas, and 16% in Pré-Saint-Gervais.
- Extending over 22,000 linear metres, this heating network will be able to supply heat and domestic hot water to 20,000 housing-unit equivalents.
- A total of 166 GWh of heat will be distributed via this heat network, including 110 GWh of renewable energy (62 GWh from geothermal energy, 47 GWh of renewable energy from heat pumps and 1 GWh from a biomass boiler plant in Pantin). Emergency backup will be provided by natural gas. In the long term, the network will achieve a renewable energy ratio of 66%.
- Geothermal energy will avoid 25,000 tonnes of CO_2 emissions each year.

PROJECT LIFECYCLE

- Feasibility study for the creation of a geothermal heat network across the 3 municipalities carried out by SIPPEREC in 2019.
- Creation of the local public company UNIGEO SPL in 2022 with shareholders the municipalities of Lilas, Pré-Saint Gervais, Pantin and Romainville and the SIPPEREC.
- Earthworks for drilling in the first half of 2023.
- Drilling of the two geothermal doublets between July 2023 and March 2024.
- Construction of the geothermal boiler plant.
- Construction of the heat network between July 2023 and November 2025.

IMPACT INDICATORS RELATING TO THE PROJECT

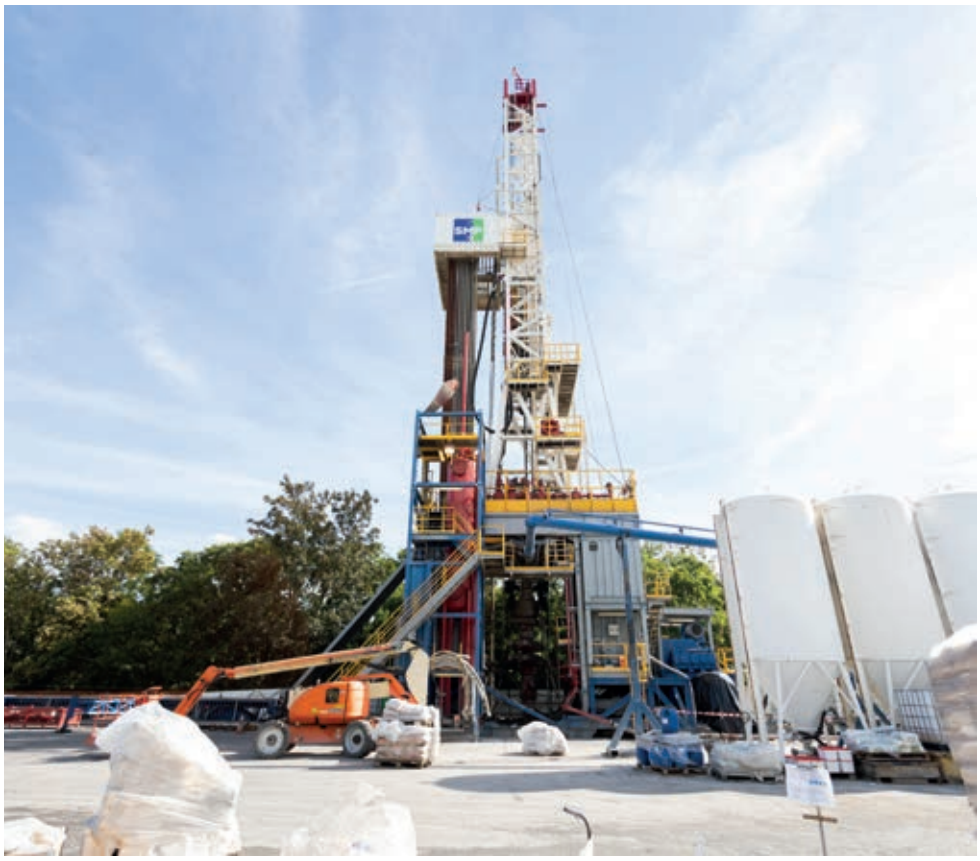
Indicator	Impact	Methodological note
FTE supported by the project	3	C-3
Number of project beneficiaries	20,000	D-7
CO_2 emissions avoided by the project	25,000 teq CO_2/year	E-5

CATEGORY ELIGIBILITY CRITERIA

Heat/cooling production from geothermal energy	Project to create a heat network using geothermal energy, powered by more than 65% renewable energy. The choice of energy production also respects the ENR'Choix approach (prioritises a local renewable and recovery energy (ENRR) source rather than a relocatable ENRR source).

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• The design of the network is optimised as a whole, with particular attention paid to the temperature regime consistent with the buildings to be heated. • In addition, precautions have been taken to avoid any pollution of the other groundwater and surface water sources at the time of geothermal drilling and the deployment of the heat network. Sealed cemented casing adapted to the characteristics of each aquifer will prevent any mixing between the aquifers.
Combating of climate change and promotion of the region's ecological transition	• This project enables the substitution of fossil fuels which emit high levels of greenhouse gases for natural gas and oil for district heating production. It is estimated that the deep geothermal installation will avoid the emission of more than 8,500 tonnes of CO_2 per year compared to a conventional gas-powered network.
Contribution to sustainable regional planning and improvement to the quality of life	• The project draws on a local, renewable and stable resource. • It improves air quality by replacing gas and oil heating systems with a particle-free geothermal solution.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• More than half of the geothermal heat produced will supply social housing, directly combating energy poverty of households.
Respect for fundamental rights	• Promotes access to renewable energy, supporting the standard of living of households to improve their living conditions constantly.
Responsible regional development	• Project helping to strengthen the amount of renewable energies used in Île-de-France and geothermal energy in particular, which is an Île-de-France speciality; the region being the leading European region in terms of geothermal installations.
Regional economic development	• The project will create local jobs during the works phase in the area. • The project reduces dependence on fossil fuels and strengthens the region's energy independence.
Fair practices, responsible purchasing and responsible supplier relations	• Application of the public procurement code by the project's representative. • Drilling of the sub-soil conducted within the regulatory framework for mining issued by the DRIEAT.
Promotion of a suitable consultation procedure with internal and external stakeholders	• The local public company UniGéo plans consultations and discussions with future users of the heat network, and more generally with all local authorities: – Organisation of public meetings and consultation with the technical services of the municipalities prior to the works – Organisation of regular meetings to present network operations during the operations phase, and creation of a network subscribers committee.



© Aurelie Blanche

The project website
https://unigeo.fr/le-projet-unigeo/

CREATION OF THE DEEP GEOTHERMAL HEAT NETWORK FOR EPINAY-SUR-SEINE, VILLETANEUSE AND PIERREFITTE

RENEWABLE ENERGY PRODUCTION AND DISTRIBUTION • NEW PROJECT

PURPOSE

Creation of a heat network powered by deep geothermal energy.

LOCATION(S)

Épinay-sur-Seine, Villetaneuse, Pierrefitte-sur-Seine

KEY DATES

Commissioning of the geothermal power plant: 2026

TOTAL PROJECT COST

€62.18M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

8.04%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€1.4M

QUALITATIVE PRESENTATION OF THE PROJECT

- The project consists of the **creation of a renewable heat network powered by deep geothermal energy extending over 18.75 km** across the municipalities of Villetaneuse, Epinay-sur-Seine and Pierrefitte (93). It includes drilling a geothermal doublet in the Dogger's aquifer at a depth of 1,730 metres, creating a 10.1 MW geothermal power plant and installing an 8.5 MW heat pump to optimise geothermal operations.
- The project will **produce 77,662 GWh/year by 2027**, including 54,825 MWH in renewable and recovery energy (EnR&R), covering the needs of 10,160 housing-unit equivalents.
- The ENR&R coverage rate by 2027 will be 66.2% (backup provided by gas).
- From deep geothermal energy, 227,820 teq CO_2 will be avoided over 20 years.
- **The main beneficiaries of geothermal heating include social landlords (55%), municipal buildings (schools and nurseries), higher education institutions, sports facilities and tertiary buildings.**
- The heat network for the municipalities of Epinay-sur-Seine, Villetaneuse and Pierrefitte-sur-Seine (93) will be operated under the management of the SMIREC (mixed syndicate for heat energy networks), which has held heat network competence for its member communities since 2013.
- This project benefited from the full involvement of all three municipalities.

PROJECT LIFECYCLE

- Works: from July 2023 to December 2026.
- First network commissioning: October 2024, with a temporary 100% gas solution.
- Commissioning of the geothermal power plant: early 2026.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	-	-
Number of project beneficiaries	10,160	D-7
CO_2 emissions avoided by the project	227,820 teq CO_2/year	E-5

REGIONAL ELIGIBILITY CRITERIA

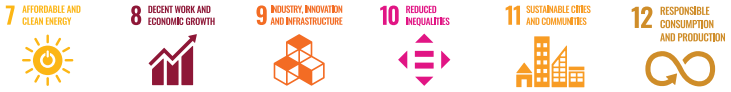
Heat/cooling production from geothermal energy	• Project to create a heat network using geothermal energy powered by more than 65% renewable energy. The choice of energy production also respects the ENR'Choix approach (prioritises a local source rather than a relocatable source).

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION	
Environmental management and eco-design of projects	• Precautions have been taken to avoid pollution of other groundwater and surface water sources at the time of geothermal drilling and the deployment of the heat network. The drilling infrastructure will be installed on a concrete platform to prevent any infiltration into the ground and a system will be installed during the construction phase to collect run-off water. Sealed cement casing adapted to the characteristics of each aquifer will prevent any mixing between the aquifers.
Combating of climate change and promotion of the region's ecological transition	• This project enables the substitution of fossil fuels which emit high levels of greenhouse gases for natural gas and oil for district heating production. It is estimated that the deep geothermal installation will avoid the emission of more than 8,500 tonnes of CO_2 per year compared to a conventional gas-powered network.
Contribution to sustainable regional planning and improvement to the quality of life	• The impact study projects an overall improvement in air quality by taking into account the discontinuous operation of the gas boiler plant. In the operations phase, the project aims to improve air quality and contribute to the fight against climate change. • The project draws on a local, renewable and stable resource.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• 55% of the geothermal heat produced will supply collective and social housing, reducing the carbon emissions from heating networks while guaranteeing stability in energy prices. This project reduces the energy poverty of households.
Respect for fundamental rights	• Promotes access to renewable energy, supporting the standard of living of households to improve their living conditions constantly.
Responsible regional development	• Project helping to strengthen the amount of renewable energies used in Île-de-France and geothermal energy in particular, which is an Île-de-France speciality; the region being the leading European region in terms of geothermal installations.
Regional economic development	• The project will create local jobs during the works phase in the area. • The project reduces dependence on fossil fuels and strengthens the region's energy independence.
Fair practices, responsible purchasing and responsible supplier relations	• Application of the public procurement code by the project's representative. • Drilling of the sub-soil conducted within the regulatory framework for mining issued by DRIEAT.
Promotion of a suitable consultation procedure with internal and external stakeholders	• The project provides for the establishment of an advisory committee for local public services. A network users committee will be set up and meet once or twice a year. Meetings will be organised regularly each year with the municipalities and social donors, which represent the vast majority of network subscribers. • An information letter will be sent to subscribers and possibly users two times a year.

The project website
www.smirec.fr

CREATION OF THE GEOMARNE HEATING NETWORK

RENEWABLE ENERGY PRODUCTION AND DISTRIBUTION • NEW PROJECT



PURPOSE

Creation of the GEOMARNE geothermal heating network.

LOCATION(S)

CA Paris Vallée de la Marne

KEY DATES

Geothermal power plant inaugurated in October 2021

TOTAL PROJECT COST

€19M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

10.53%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€1.8M

QUALITATIVE PRESENTATION OF THE PROJECT

- The project includes the drilling of a geothermal doublet in the Dogger at a depth of 1,900 metres, the creation of a 30 MW power plant in Champs-sur-Marne and the development of a heat network over 19 km in the municipalities of Champs-sur-Marne and Noisiel.
- The grid plans to deliver 107 GWh of heat at 82% renewable origin through 120 delivery substations.
- The heat provided by the grid will cover the needs of more than 10,000 housing-unit equivalents, i.e. 1 million m^2.
- Deep geothermal energy avoids emissions equivalent to 25,000 tonnes of CO_2 per year, which is equivalent to the annual emissions of 17,000 vehicles.

PROJECT LIFECYCLE

- Geothermal drilling work: December 2019 - March 2020.
- Inauguration of the power plant: October 2021.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	-	-
Number of project beneficiaries	10,000	D-7
CO_2 emissions avoided by the project	25,000 teq CO_2/year	E-5

REGIONAL ELIGIBILITY CRITERIA

Heat/cold production from geothermal energy.	• Project to create a heat network using geothermal energy, powered by over 65% energy from a renewable source. The choice of energy production also respects the ENR'Choix approach (privileges a local renewable and recovery energy source rather than a relocatable renewable and recovery energy source).

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION	
Environmental management and eco-design of projects	• The design of the network is optimised as a whole, with particular attention paid to the temperature regime consistent with the buildings to be heated. • In addition, precautions have been taken to avoid any pollution of other groundwater and surface water sources at the time of geothermal drilling and the deployment of the heat network.
Combating of climate change and promotion of the region's ecological transition	• This project enables the substitution of fossil fuels which emit high levels of greenhouse gases for natural gas and oil for district heating production. It is estimated that the deep geothermal installation will avoid the emission of more than 25,000 tonnes of CO_2 per year compared to a conventional gas-powered network.
Contribution to sustainable regional planning and improvement to the quality of life	• The project draws on a local, renewable and stable resource. • It improves air quality by replacing gas and oil heating systems with a particle-free geothermal solution.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• More than half of the geothermal heat produced will supply social housing, directly combating energy poverty of households. • Geothermal energy helps to protect households from fluctuations in fossil fuel prices.
Respect for fundamental rights	• Promotes access to renewable energy, supporting the standard of living of households to improve their living conditions constantly.
Responsible regional development	• Project helping to strengthen the amount of renewable energies used in Île-de-France and geothermal energy in particular, which is an Île-de-France speciality; the region being the leading European region in terms of geothermal installations.
Regional economic development	• The project will create local jobs during the works phase in the area. • The project reduces dependence on fossil fuels and strengthens the region's energy independence.
Fair practices, responsible purchasing and responsible supplier relations	• Application of the public procurement code by the project's representative. • Drilling of the sub-soil conducted within the regulatory framework for mining issued by the DRIEAT.
Promotion of a suitable consultation procedure with internal and external stakeholders	• Organisation of regular meetings to present network operations during the operations phase, and creation of a network subscribers committee.

© REZOMEE

The project website
www.rezomee.fr/geomarne

ACCESS TO ESSENTIAL SERVICES: EDUCATION

Projects aimed at improving access to quality infrastructure in education (public secondary and higher education): through increased capacity of existing educational facilities or improvements to their quality.

In 2017, faced with both the aging condition of certain high schools and the sometimes inadequate distribution of educational offerings across Île-de-France, the Region committed to improving access to education by ensuring that all 530,000 high school students in the region would benefit from a new or renovated school by 2028.
The Emergency Plan for Île-de-France High Schools, updated in 2021, includes the development of sports facilities, the implementation of adaptations for students with disabilities, and the improvement of buildings across all regional high schools.
Since 2019, every high school student receives a laptop computer preloaded with digital textbooks.

- **Regional jurisdiction:** mandatory for high schools; projects related to higher education are part of State-Region cooperation frameworks.
- **Form of intervention:**
  → **High schools:** project ownership with delegated contracting authority.
  → **Higher education:** grants or direct project ownership.
- **Target audience:** high school students, university students, teachers, researchers.

PROVISION OF INDIVIDUAL DIGITAL EQUIPMENT FOR HIGH SCHOOL STUDENTS AND TEACHERS IN THE ÎLE-DE-FRANCE REGION

IMPROVEMENT OF THE QUALITY OF EXISTING EQUIPMENT FOR PUBLIC SECONDARY EDUCATION

PURPOSE

Deployment of personal computers for high school students and teachers across the Île-de-France region.

LOCATION(S)

Accross all high schools in Île-de-France.

KEY DATES

2024

TOTAL PROJECT COST

€375M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

100%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€62.5M

HISTORY OF PROJECT

Financing by the Region's previous green and sustainable bonds

2016	2017	2018	2019	2020	2021	2022	2023
-	-	-	-	€45.9M	-	-	-

QUALITATIVE PRESENTATION OF THE PROJECT

- **The project involves the provision of laptops to high school students and teachers in the Île-de-France region.**
- The main actions are as follows:
  - → **Issuance of a global purchase order** based on the previous year's student enrolment figures and the number of schools listed on the regional digital learning platform (ENT).
  - → **Identification of eligible users** for each school, based on data from the MonLycée.net ENT directory and the HI SQOOL application.
  - → **For schools joining the program for the first time**, a prerequisite is the signing of a data-sharing agreement for the academic directory, enabling the ENT to be populated with student and staff accounts.
  - → **Based on the collected data**, the Region places the order with the service provider, transmitting the necessary information for equipment allocation (number of users per school, ENT identifiers, and user profiles).
  - → **Delivery and commissioning of the equipment** are carried out by La Poste.

PROJECT LIFECYCLE

- Each device is delivered with a carrying case and a charger. It comes with a pre-installed operating system and an "integrated digital education solution" such as HI SQOOL or an equivalent platform, along with the corresponding licenses.
- Deliverables justifying the need and the equipment order:
  - → All documents related to public procurement contracts No. 1900025 and No. 2300739 between the Île-de-France Region and La Poste.
  - → Data extracts from the *MonLycée.net* digital learning platform (ENT).
  - → Purchase orders.
- Deliverables justifying delivery and implementation:
  - → Delivery slips.
  - → Service completion certificates.
  - → Invoices.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	1	C-2
Number of project beneficiaries	500,000	D-1
CO_2 emissions avoided by the project	-	-

REGIONAL ELIGIBILITY CRITERIA

Improvement of the quality of existing equipment for public secondary education	• Laptops and digital textbooks are intended for all high school students in the Île-de-France region.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• Since 2024, the laptops provided have been designed using recycled aluminum. Their repairability and hardware upgradeability are ensured through a modular and scalable design.
Combating of climate change and promotion of the region's ecological transition	• This enables significant savings on the printing of shcool textbooks, which previously required regular updates.
Contribution to sustainable regional planning and improvement to the quality of life	• Contributes to a balanced territorial development by reducing the digital divide.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• **The objective is to provide laptops to all high school students in the Île-de-France region in order to:** – Ensure continuity of learning; – Prevent school dropout. • **Secondary objectives include:** – Accelerating the digital transformation of high schools and promoting interactive and innovative teaching practices; – Enabling access to innovative and free regional educational resources; – Reducing the digital divide, which remains significant in Île-de-France, by ensuring access to digital education for all students in both public and private high schools.
Respect for fundamental rights	• **The project contributes to non-discrimination by promoting access to digital education for all high school students in the Île-de-France region.** • Digital textbooks are accessible each year through the provided devices. • This initiative also supports gender equality by facilitating equal access to digital culture for both male and female students.
Responsible regional development	• The solution relies on companies based in the Île-de-France region.
Responsible regional development	• The solution relies on companies based in the Île-de-France region.
Fair practices, responsible purchasing and responsible supplier relations	• The contract was awarded in accordance with the procurement policies of the Île-de-France Region.
Promotion of a suitable consultation procedure with internal and external stakeholders	• The contract was awarded in accordance with the procurement policies of the Île-de-France Region.

Les tablettes et les ordinateurs portables sont cofinancés par le Fonds européen de développement régional

Région îledeFrance

The project website
www.transfonum.monlycee.net

© Chloé Sharrock-MYOP

AFFORDABLE BASIC INFRASTRUCTURES

(TRANSPORT, ENERGY, GREEN SPACES AND SPORTING FACILITIES)

Development, construction and renovation of basic infrastructure enabling the well-being of all human beings, within a sustainable development approach.

The Region supports the development of basic infrastructure in the fields of local renewable energy and energy efficiency, green spaces, preservation of natural environments and biodiversity, as well as the development of sports facilities.

By investing in better infrastructure, the Region aims to improve comfort for users and local residents, particularly following the hosting of sports delegations during the Paris 2024 Olympic and Paralympic Games. The Region's leisure islands, covering a total of 3,000 hectares of nature, also offer opportunities to escape and relax, as well as to enjoy a wide range of sports, recreational and cultural activities.

- **Forms of intervention:**
  → **Sports infrastructure:** grants or direct project ownership.
  → **Leisure islands:** direct project ownership (regional properties).
- **Target audience:** local residents, amateur and professional athletes.

CENTRE FOR SPORTS RESOURCES, EXPERTISE AND PERFORMANCE (CREPS)

AFFORDABLE BASIC INFRASTRUCTURES

PURPOSE

Reconstruction and restructuring of the CREPS site.

LOCATION(S)

Châtenay-Malabry (92)

KEY DATES

Procedure launched in 2020
Delivery: first quarter 2024

TOTAL PROJECT COST

€37M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

100%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€1.6M

HISTORY OF PROJECT

Financing by the Region's previous green and sustainable bonds

QUALITATIVE PRESENTATION OF THE PROJECT

- This operation is part of an overall project initiative for this site and has the following objectives: development of the CREPS as **part of welcoming the sporting delegations under the Olympic and Paralympic Games in Paris in 2024**, improving the reception conditions for elite athletes and making the different site functions consistent, reshaping the CREPS boundaries which involves three buildings at the East of the site being released from all activity and transferred to the West of the site (reception, administration, catering and training rooms) and hosting additional sports centres, in addition to the six top-level sports centres and the ten Espoirs centres currently located on the Île-de-France CREPS site.
- The project also provides for producing additional sports facilities, creating a small community (8) housing units and redeveloping outdoor spaces following the structuring of the site's functions.

PROJECT LIFECYCLE

- The overall budget for the operation was voted on during the Standing Committees (SC) on 20 November 2019 and 21 January 2021.
- The procedure was launched by publishing a call for competition sent on 4 December 2019.
- The first selection panel met on 26 February and 11 March 2020 and the proposed winner panel met on 22 March 2021. The contract was awarded at the Tenders Commission meeting on 9 April 2021.
- Commencement of work: September 2022.
- End of work: first quarter 2024.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	10,000 hours	B
Number of project beneficiaries	320	D–8
CO_2 emissions avoided by the project	689 teq CO_2/year	E–9

CATEGORY ELIGIBILITY CRITERIA

Development and extension of sports facilities	• Development of the CREPS in the context of hosting sports delegations for the Paris Olympic and Paralympic Games in 2024, improving conditions for high-level athletes.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION

Environmental management and eco-design of projects	• The group includes INCET for environment- and energy-related tasks. • The candidate has committed to energy consumption performances and obligations of means and results for air quality and summer comfort. • A commissioning process is planned for the project (a commissioning agent is involved in the project in the operating phase). • The energy performance contract is twofold, through an intrinsic energy performance guarantee up to acceptance of the buildings and the definition and monitoring of actual energy targets during the operating phase, by setting up a Measurement and Verification Plan.
Combating climate change and promoting the Region's green transition	• Limiting energy consumption by achieving level E3 overall (achieved by using 23 kWp of photovoltaic solar panels) and by controlling consumption in operation (energy performance commitment). • Limiting carbon emissions by achieving level C1 overall and using bio-based materials (18 kg/m^2 of floor area achieved due to the wooden framework of the sports building in particular). • Limiting water consumption through rainwater recovery for watering. • Limiting sealing/enhancing biodiversity/combating the effect of urban heat by using permeable parking spaces (grassed or gravelled concrete hollow-core slabs) and through 36% green roofs.
Contributing to the Region's sustainable development and the improvement in quality of life	• Performance-related objectives relating to indoor air quality, summer comfort and expected service levels. • Inclusion of energy objectives in the programme. • Materials requirements (limiting the carbon impact, bio-based sector). • Environmental requirements relating to rain water collection, limiting the sealing and green roofs.
Contributing to socially-inclusive development, combating inequality and promoting the safety of individuals	• Bringing the site up to standard to provide access for people with disabilities. • Preventing health risks for site personnel, who will be provided with appropriate personal protective equipment (ear and eye protection, helmets, gloves, protective trousers and shoes, etc.) listed in the company's Special Safety and Health Protection Plan (PPSPS). • Mandatory professional integration hours for the group.
Respect for fundamental rights	• Respect for fundamental rights established under public procurement contracts.
Responsible regional development	• Project encouraging access by soft modes (pedestrians, bicycles and public transport) tram stop in front of the site. • Landscape redevelopment of part of the site into a pedestrian area.
Regional economic development	• Receiving international sporting delegations. • Promoting French sports teams worldwide.
Fair practices, responsible purchasing and responsible supplier relations	• This process is conducted as part of an Environmental Quality approach in accordance with the Region's objectives and is subject to specific specifications.
Promotion of a suitable consultation procedure with internal and external stakeholders	• Consultation of all project stakeholders (management, teachers, service personnel, sports movement, associations) on the various definition phases of the development project and throughout its execution.

The project website
www.creps-idf.fr

© I-Stock

SUPPORT FOR JOB CREATION, PREVENTION AND FIGHT AGAINST CRISIS-RELATED UNEMPLOYMENT

(INCLUDING THROUGH FINANCING MEASURES FOR SMES AND MICS)

Projects contributing to the creation or preservation of local employment, through support for very small enterprises (VSEs) operating within the social and solidarity economy. Assistance for research and innovation by SMEs in favor of ecological and social transition and territorial attractiveness.

Regions now hold responsibility for economic development within their territories (Law of August 7, 2015 on the New Territorial Organization of the Republic – NOTRe). In this context, a new economic strategy (SRDEII: Regional Strategy for Economic Development, Innovation, and Internationalization) was developed at the end of 2016. It aims to unlock and encourage the exceptional potential for growth, employment, and innovation in the Île-de-France region. It is based on four themes: investing in attractiveness, developing competitiveness, fostering entrepreneurship and innovation across all territories, and acting collectively in support of businesses, employment, and the region.

To this end, addressing environmental challenges aligns with the objective of identifying all potential in terms of economic activity, employment, innovation, and improving the living environment of Île-de-France residents.

Also responsible for higher education, research, and innovation, the Île-de-France Region adopted in 2017, following extensive consultation with various stakeholders (economic actors, researchers and academic staff, students, teachers, vocational training trainees), its new Regional Plan for Higher Education, Research, and Innovation. Innovation, quality, and excellence are at the heart of this regional strategy, which is structured around major orientations: guidance, reorientation, lifelong learning and integration, making Île-de-France a global reference in science and technology, and supporting world-class universities and campuses in the region.

- **Regional area of competence:** mandatory.
- **Forms of intervention:** grants, capital endowments, equity investments.
- **Target audience:** VSEs and SMEs, competitiveness clusters, investment funds for SMEs, honor loan funds, social and solidarity economy associations.

ENERGY EFFICIENCY VOUCHER

SUPPORT FOR EMPLOYMENT • NEW PROJECT

PURPOSE

Support very small businesses (VSBs), particularly local artisans and shopkeepers, in their ecological transition.

LOCATION(S)

Île-de-France Region

KEY DATES

2021-2024

TOTAL PROJECT COST

- €11.25M have been allocated since 2021 (including the Energy Efficiency Voucher and the Green Voucher)
- €10.91M were dedicated solely to the Energy Efficiency Voucher

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

This is a lump-sum amount based on a tiered system.
The Region's maximum contribution rate is 50%, and up to 80% for bakers between January 2023 and June 2024.

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€6.3M

QUALITATIVE PRESENTATION OF THE PROJECT

- The Energy Efficiency Voucher aims to support very small businesses (VSBs), particularly artisans and shopkeepers with fewer than 20 employees, in their ecological transition.
- It targets the following topics:
  - → Reducing energy consumption (e.g heat pumps, led lighting, professional refrigeration equipment, low-temperature radiators, storefront insulation, etc.),
  - → Reducing water consumption (e.g water-saving aerators),
  - → Improving indoor air quality (e.g ventilation systems, air purifiers, filtration equipment),
  - → Promoting soft mobility (e.g cargo bikes, charging stations),
  - → Encouraging reuse systems and waste management (e.g reusable containers, sorting bins, shredders, composters).
- The Energy Efficiency Voucher helps improve the energy performance of businesses by funding investments aimed at reducing energy consumption (such as low-energy equipment, replacement of outdated energy-intensive systems, insulation work, and preliminary diagnostics linked to material or construction expenses). The aid can also support investments that indirectly contribute to energy performance improvements, such as circular economy initiatives, waste sorting and management, and soft mobility solutions.

PROJECT LIFECYCLE

- The Energy Efficiency Voucher has supported 1,590 businesses in the Île-de-France region, for a total of €10M (to add to the 298 green vouchers amounting to 339,600€), 43% of the beneficiaries were bakers-pastry chefs.
- In 2024, €6.3M were allocated, supporting 897 businesses in the Region.

IMPACT INDICATORS RELATING TO THE PROJECT

Indicator	Impact	Methodological note
FTE supported by the project	590	C-3
Number of project beneficiaries	1,590 businesses	D-9
CO_2 emissions avoided by the project	-	-

REGIONAL ELIGIBILITY CRITERIA

Projects that help create or sustain local jobs	• These vouchers are designed to improve the environmental performance of very small and small businesses (VSBs/SMEs), while helping them enhance their competitiveness by reducing operating costs. The project also supports local economic activity by engaging installers and craftsmen, and contributes to maintaining local services and businesses across the Region.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION	
Environmental management and eco-design of projects	• The aid exclusively targets investments aimed at improving the environmental performance of very small and small businesses (VSBs/SMEs), based on strict criteria (technical requirements, minimum performance levels, certifications) in areas such as energy efficiency, water management, ventilation, and circular economy. • It therefore acts as a direct lever for the ecological transformation of equipment and installations, aligned with an on-site eco-design approach.
Combating of climate change and promotion of the region's ecological transition	• **The scheme is fully aligned with the region's ecological transition and energy-climate strategy**, focusing on **reducing energy consumption, improving equipment efficiency,promoting the use of renewable energy sources** (e.g. heat pumps, solar water heaters), **developing soft mobility**, and **reducing waste**.
Contribution to sustainable regional planning and improvement to the quality of life	• Indirect yet significant contribution: the scheme improves the environmental performance of business premises in both urban and rural centres, while enhancing thermal comfort and indoor air quality for employees and customers. • The voucher contributes to the environmental sustainability of economic activities in densely populated areas.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• **Indirect contribution**: the target audience consists of **very small businesses (VSBs)**, often more vulnerable, particularly **artisans and shopkeepers**. However, the scheme's regulations do not include specific social solidarity criteria. • That said, **some of the funded equipment contributes to personal safety**, such as **ventilation systems, air quality improvements, and secure refrigeration equipment**.
Respect for fundamental rights	• Beneficiaries commit to upholding the values of the Republic and secularism, in accordance with the regional charter.
Responsible regional development	• The aid supports very small and small businesses (VSBs/SMEs) in making environmentally responsible investments aligned with the region's sustainability goals. • It helps shift the practices of local businesses toward a more sustainable model.
Regional economic development	• **Strong economic lever:** the scheme enhances **business competitiveness** by reducing **operating costs** (energy, maintenance), supports **local activity** among installers and artisans, and helps **maintain local services and businesses** across the region. The voucher clearly aims to **reconcile economic development with ecological transition**.
Fair practices, responsible purchasing and responsible supplier relations	• **Expenditures must be made under market conditions and through independent third parties** (i.e. no ownership or control links between the beneficiary and the supplier), ensuring the **integrity of purchases. Compliance with CEE criteria** and the use of **recognized labels** (such as *Flamme Verte* or *CSTBat*) help uphold **high quality standards**.
Promotion of a suitable consultation procedure with internal and external stakeholders	• **The investments directly affect the working conditions or environment of employees and customers**, which implies the need for **informal consultation within the beneficiary organization**.

The project website
https://www.iledefrance.fr/aides-et-appels-a-projets/cheque-efficacite-energetique

AFFORDABLE HOUSING

Projects for the development of social housing stock for families, young people, and students, meeting environmental and social standards and contributing to the reduction of territorial social divides.

In addition to supporting the creation of social housing for families, young people, and students,

the regional policy implemented since 2016 also aims to provide assistance for intermediate housing targeted at middle-class households, offering a complementary response to the housing crisis. The goal is to address the difficulties faced by the middle class in securing housing in Île-de-France and to promote greater social diversity. By renewing the Regional Plan for Higher Education, Research, and Innovation (SRESRI) for the 2023–2028 period, the Region has also committed to developing a "general regional policy to improve students' living conditions."

- **Regional area of competence:** optional.
- **Form of intervention:** grants to social project owners, semi-public construction companies, associations and organizations approved for integration project ownership, local authorities and their groupings, as well as local public companies.
- **Target audience:** students, households whose income qualifies them for intermediate or social housing.

CONSTRUCTION OF A STUDENT RESIDENCE

AFFORDAVBLE HOUSING • NEW PROJECT

PURPOSE

Construction of a subsidized student residence with 144 housing units under PLUS and PLS schemes, offering 150 places.

LOCATION(S)

266, boulevard de la Boissière,
ZAC Boissière-Acacia - ilot B1 à Montreuil ZAC (93)

KEY DATES

CP 2018-257 on the 4th of July, 2014

TOTAL PROJECT COST

€11.53M

REGION'S SHARE (%) IN THE TOTAL AMOUNT OF THE PROJECT

7.58%

2024 FINANCING OF THE PROJECT THROUGH THE GREEN AND SUSTAINABLE BOND

€0.7M

QUALITATIVE PRESENTATION OF THE PROJECT

- Purchased off-plan (VEFA) by the social housing company MEECAM (initially Efidis), and managed in partnership with Studefi, this student residence is located within the Boissière-Acacia development zone (ZAC) in the Hauts de Montreuil neighborhood, near the future La Dhuys metro station, part of the extension of line 11.
- The development zone (ZAC) spans 13 hectares in the northern part of Montreuil, on an area largely made up of former industrial wastelands. **The diverse construction program includes, in addition to the student residence, social housing, privately owned housing, business premises, and public facilities** (such as a school complex, daycare center, sports areas...). The goal is to create a mixed-use and sustainable neighborhood.
- **150 students are housed in the 144 units (54 under PLUS and 96 under PLS schemes) of this six-story residence (R+6)**. There are 140 studio apartments (T1) suitable for individual students, and 4 larger units (T3 and T4) designed for shared accommodation. 5% of the units are equipped to accommodate people with reduced mobility. Numerous shared spaces are available to residents, including relaxation and study rooms, a laundry room, a bicycle storage area, and communal terraces.
- **The residence is certified NF Habitat HQE "high performance" and labeled RT 2012-20%**. It is connected to the urban heating network for its hot water and heating needs, with the following energy mix: 42% geothermal energy, 43.7% heat pump, and 14.3% gas.

PROJECT LIFECYCLE

- State approval: December 27, 2016.
- Building permit issued: March 6, 2018.
- Regional subsidy allocation: July 4, 2018.
- Completion and delivery: July 6, 2023.

IMPACT INDICATORS RELATING TO THE PROJECT		
Indicator	**Impact**	**Methodological note**
FTE supported by the project	67.54	A-3
Number of project beneficiaries	150	D-2
CO_2 emissions avoided by the project	-	-

REGIONAL ELIGIBILITY CRITERIA	
Affordable housing : increase in the capacity of social housing	• Creation of a subsidized student residence, primarily intended for scholarship holders, with regulated fees (rent + charges). The project follows a certified sustainable development approach and features an ambitious energy label, exceeding the regulatory minimum at the time. The residence is connected to the local geothermal heating network. The construction contract includes hours dedicated to social integration through employment.

JUSTIFICATION OF PROJECT ELIGIBILITY FOR EACH CRITERION	
Environmental management and eco-design of projects	• NF Habitat HQE Certification (RT 2012) • The NF certification guarantees the overall quality and performance of housing units. Delivered by an independent organization (Cerqual), it requires compliance with a very strict set of specifications. • The NF Habitat HQE certification focuses on three main pillars to assess the overall quality of a dwelling: optimizing energy performance, respecting the environment, and ensuring quality of life.

Combating climate change, and promoting the Region's environmental transition	• RT 2012 – 20% Label: This label sets an energy performance level significantly higher than the requirements of the 2012 thermal regulation. • As its name suggests, the RT 2012 – 20% label aims to reduce environmental impact by 20% compared to the standards set by the original RT 2012 regulation. This is reflected in two target values: – The building's primary energy consumption, or "Cep max," must be at least 20% lower than the threshold defined by the State under the RT 2012 regulation. This means a maximum of 40 kWhEP/ m^2/ year, compared to the standard RT 2012 threshold of 50 kWhEP/m^2/year (which varies depending on location, as a coefficient is applied to account for local climatic conditions) ; – The bioclimatic needs coefficient, or "Bbio," must also be at least 20% lower than the value required by thermal regulations. To achieve this, builders favor smart architectural solutions that reduce energy dependence, such as skylights for natural lighting or green roofs that help regulate indoor temperature. • The program is connected to a district heating network that uses more than 40% local geothermal energy. • By joining a joint geothermal drilling project with the cities of Rosny-sous-Bois and Noisy-le-Sec, the city of Montreuil chose to harness a natural, eco-friendly, and cost-effective energy source. • Drilling work for the shared heating network of the three cities, known as YGéo, began in March 2015. The geothermal heating plant, with a capacity of over 10 MW, was commissioned in 2016. • As a clean alternative to fossil fuels, geothermal energy also helps prevent the release of thousands of tons of carbon dioxide, sulfur, nitrogen oxides, and hundreds of tons of particulate matter into the atmosphere each year.
Contribution to sustainable regional planning and improvement to the quality of life	• Connected to a district heating network powered by geothermal energy, the program offers low-cost, decarbonized energy. • The development zone (ZAC) in which this program is located includes generous green spaces: 15% of open soil areas, 150 large trees, 200 to 300 small shrubs, and 4,500 m^2 dedicated to a plant nursery.
Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals	• The Boissière-Acacia development zone (ZAC), in which this project is located, is a comprehensive urban initiative that integrates various types of housing programs (homeownership, social rental) and building types (family housing, student housing), promoting a mix of residents to better meet local needs and ensure continuity in residential pathways. Several public facilities are planned to meet the needs of residents, including a daycare center, a school complex, and sports areas. • The project includes the creation of a subsidized student residence with regulated rent and charges, managed by an association specialized in housing for young people and students. Within the residence itself, many shared spaces are available to students, encouraging interaction and a sense of community. The residence welcomes scholarship students with limited financial resources, offers shared housing units, and provides communal areas that foster social exchange and diversity. • The residence is secured, with an on-site manager, video intercom connections between residents and visitors via the Intratone system, and access controlled by Vigik remote keys.
Respect for fundamental rights	• The ZAC project has been developed in consultation with citizens since 2008, through public meetings, workshops, and municipal council sessions. • It contributes to improving access to higher education for scholarship students. • 5% of the housing units are equipped to accommodate people with reduced mobility.
Responsible regional development	• This operation is part of the broader Boissière-Acacia development zone (ZAC), which covers an area of 13 hectares, largely made up of former industrial wastelands. • The development of this ZAC is supported by two new metro stations from the extension of line 11, and by the arrival of tramway T1, which will run along the former A186 highway corridor, connecting Bobigny and Noisy-le-Sec to Val-de-Fontenay. These new transport links bring Haut Montreuil closer to central Paris and the RER E, and will be accompanied by a reconfiguration of the bus network. • The ZAC addresses multiple objectives: Create a sustainable neighbourhood with a diverse housing offer; Develop an attractive mixed-use area (housing / businesses / public facilities) connected to new public transport networks; Strengthen links between the new district and surrounding existing neighbourhoods by relying on a network of pedestrian paths and openings that structure these areas; Build a new part of the city based on an ambitious approach to urban, environmental, and sustainable quality of life; Maintain a dense urban fabric while promoting quality living conditions and meeting the environmental goals set by the sustainable development framework
Responsible economic development	• The project contributes to job creation and support. According to an employment impact ratio from the Ministry of Sustainable Development, €1 million in construction work for new buildings equals 11.6 full-time equivalent jobs (FTE). • At the ZAC level, 9,100 m^2 of gross floor area (GFA) is dedicated to business activities.
Fair practices, responsible purchasing and responsible supplier relations	• Social inclusion clauses were implemented as part of the operation, with 5,372 hours completed. • The approval process was transparent, with clearly defined eligibility criteria outlined in a framework resolution accessible to all.
Promotion of a suitable consultation and procedures with internal and external stakeholders	• Public consultation for the creation of the ZAC was carried out in accordance with Article L.300-2 of the French Urban Planning Code, through a dedicated website, public meetings, thematic workshops, and publications in the municipal newsletter. • The project file and the proposed allocation were presented to the thematic commission and voted on in the permanent commission.

The project website
https://www.montreuil.fr/urbanisme/haut-montreuil/zac-boissiere-acacia

APPENDICES

APPENDIX 1: METHODOLOGICAL NOTE

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 2024 expenditures which took place for each of the schemes (cf. b below for the methodology).

b. 2024 financing by the green and sustainability bond

The amount shows corresponds with 2024 expenditures related to the corresponding project/scheme. Two exceptions, for which an amount than the 2024 expenditures was selected for the project "Nexteo RER B & D", category "Clean transportation", and ***"Provision of individual digital equipment for high school students and teachers in the Île-de-France region" in the "Access to essential services: education" category.***

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 Île-de-France Region and by the public accountant.

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

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

2. Methodology for reading each project under the lens of the United Nations Sustainable Development Goals

The process followed has been formalized as follows:

- On the one hand, the projects were assessed against twelve objectives out of seventeen.
- Indeed, goals N°2, 3, 5, 16 and 17 ("Zero Hunger", "Gender Equality", "Good health and well-being", "Peace, Justice and Strong Institutions" and "Partnerships for the Goals") focus more on the social responsibility of the Region as an institution, than on the nature of the investment projects financed under the green and sustainable bond issue program. Given the geographical situation of Île-de-France, goal N°14 "Life below water - conserving and sustainably exploiting oceans, seas and marine resources" does not concern any project in the Paris region (the preservation and restoration of fresh water and wetland ecosystems fall within the scope of goal N°15.
- On the other hand, some sustainable development goals apply uniformly to all projects eligible for green and sustainable bond, given the project eligibility criteria grid that has been established by the Region (green columns). Thus, each eligible project contributes to the reduction of inequalities and therefore to the struggle against poverty (goals N°1 and 10), sustainable development of cities and territories (goal N°11), responsible production (goal N°12), and the fight against climate change (goal N°13).
- The contribution of each project to the remaining goals is evaluated on a case by case basis, according to the specificity of each project as described in the sheets accompanying this reporting.
- The list of targets for each Sustainable Development Goal is available on the International Labour Organization website: www.ilo.org/global/topics/dw4sd/theme-by-sdg-targets/WCMS_622221/lang--fr/index.htm.

3. Methodologies relative to the impact indicators for the project presented

A, B and C: FTEs supported by the project

a. Worksite FTEs supported by the project

- **A-1:** Value of Call for Tenders Excluding Taxes x 43% (BT01 TCE Index) / number of hours worked throughout the construction period.
  With 1 hour worked = €30 excl. tax and 1,650 hours worked per year.
- **A-2:** Method of the National Federation of Public Works: € 1 million invested in the public works sector generates 7.1 direct jobs. This ratio is applied to the total amount of the project and thus concerns the entire duration of the project.
- **A-3:** Usage of the employment impact ratio of the Ministry of Sustainable Development (11.6 FTE for € 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:** Usage of the study conducted by the Territories Bank in November 2021: creation or retention of 2.4 FTEs in the construction sector for the new construction of one social housing (1.2 direct FTE and 1.2 indirect FTE); creation or retention of 0.5 FTE for the restoration of a social housing (0.4 direct FTE and 0.1 indirect FTE).

b. Integration FTEs supported by the project

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

Number of hours of integration =
[Size of market Excluding Taxes x share of workers from the State (from 25% to 60%)
x Integration rate (from 5% to 7% depending on the facilitator)] / average hourly cost

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

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

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

c. Operation FTEs consecutive to the project

- **C-1:** Estimation of the annual hourly amount of work for maintenance, regulatory checks and cleaning.
- **C-2:** estimation or the annual quantity of hours of work for the functioning of the new parts of the project. This estimation is based on the cost of the total wages needed for the functioning of the new parts of the projects, with a total average gross salary of €45k (average weighted cost of personnel).
- **C-3:** Number of people working in the facility at 31/12/2017.

d. Number of beneficiaries of the project

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

e. CO_2 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 CO_2 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 CO_2 forecast in the sector in the reference scenario and emissions of CO_2 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). CO_2 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 CO_2 averted is the difference between the 2 solutions.
- **E-6:** Estimation based on the carbon balance methodologies of ADEME and SNCF-Réseau.
- **E-7:** Information communicated by the project manager.
- **E-8:** According to the ADEME methodology, which estimates 4.8 teqCO_2/ha/year as "the CO_2 equivalent of the net atmospheric carbon absorbed by the forest (corresponding to the balance between photosynthesis and tree respiration), from which are subtracted the emissions associated with tree mortality and wood removal (the carbon corresponding to the volumes of dead or removed wood being considered as immediately being emitted back into the atmosphere as CO_2)." - https://www.territoires-climat.ademe.fr/ressource/435-152
- **E-9:** Assessment established by the E+C- label: Positive energy and carbon reduction

APPENDIX 2: ADDITIONAL DEFINITIONS AND POSSIBLE ILLUSTRATIONS OF THE ELIGIBILITY CRITERIA

ENVIRONMENTAL MANAGEMENT AND ECO-DESIGN	
Vigeo 2016 **definition**	• *"The project is implemented in accordance with an eco-design (or eco-construction) approach, and/or an approach aimed at managing its environmental impact (pollution, nuisance, resources, and biodiversity, etc.)"*
Additional definition	• The eco-design consists of accounting for the environment from the design of a product or service through all stages of its life cycle. In the context of operations financed by the Region, the eco-design can be understood as accounting for the environment in the scheme falling within the scope of the project, as well as in the operations of the construction when it is an eco-construction.
Possible illustrations	• 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. • 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 Development 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.
Illustrations possibles	• Expected objective to reduce CO_2 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.
Illustrations possibles	• 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).

SOCIALLY INCLUSIVE DEVELOPMENT, COMBATING INEQUALITY, AND PROMOTING THE SAFETY OF INDIVIDUALS

***Vigeo 2016* definition**	• *"The project contributes to combating social exclusion, to reducing inequality, or to preventing risks relating to health, working conditions, and/or individuals' safety (users, neighbouring residents, and staff)".*
Additional definition	The project may promote: • Accessibility of places to all of the public (deaf, blind, handicapped, etc.), • Integration of disadvantaged persons (distant from employment, schooling, access to new information and communications technologies, etc.), • Personal security on the site (video surveillance, security personnel, fire safety measures, etc.), • Participation in development of leisure tourism for all.
Illustrations possibles	• 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.
Illustrations possibles	• Security and health of persons, workers on construction sites. • Right to come and go. • Right to education. • Equal rights and opportunities.

RESPONSIBLE REGIONAL DEVELOPMENT

***Vigeo 2016* definition**	• *"The project increases the Region's attractiveness in keeping with sustainable and balanced economic development".*
Additional definition	• The project participates in the development of dynamization of the region from a long-term perspective, responding to a need, or anticipating the creation of new needs, or accompanying the urban development of a sector.
Illustrations possibles	• 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.
Illustrations possibles	• Creation / support to FTEs.

FAIR PRACTICES, RESPONSIBLE PURCHASING AND RESPONSIBLE SUPPLIER RELATIONS	
Vigeo 2016 **definition**	• *"The project is implemented in compliance with fair practice principles (combating corruption, fair competition, respect for labour laws, and equal treatment, etc.). Environmental and social factors are included in the purchase of products and services relating to the project. The purchasing practices relating to the project enable the interests of suppliers and sub-contractors to be respected (payment terms, managing dependency, and equality of access to orders, etc.)".*
Additional definition	• The different service providers acting on the project have been selected in the framework of a transparent procedure, in respect of the principle of equal treatment and of competition. Environmental and/or social requirements are provided for in the specifications and regulations of the subsidy.
Illustrations possibles	• 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 organisations, and representation of elected officials, etc.), whose expressed requirements are taken into account".*
Additional definition	• The project was implemented in a context of consultation aiming to account for the needs of stakeholders without distorting the object of the project.
Illustrations possibles	• 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.

GLOSSARY

ABF
Architectural Review Board.

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

ADABIATIC MODEL
Air cooling system using the principle of water evaporation to cool an airflow.

AHU
Air handling unit.

ANRU
National Agency for Urban Renewal.

ATC
Apprenticeship Training Centre.

BEPOS BUILDING (CALLED "POSITIVE ENERGY")
building that has very low energy consumption. Its primary energy consumption must be less than the amount of renewable energy it produces via its equipment.

BEPOS EFFINERGIE 2013 LABEL
A positive energy building with a C level determined by the BEPOS balance, which accounts for all energy uses within the building (including renewable energy).
The E level is based on greenhouse gas emission indicators across the entire life cycle, including construction products and components used.

BUILDING LIFE BOOK
Document describing the infrastructures concerned, principal equipment, advice on how to operate this equipment and indicators of good environmental practice in order to save water and energy.

CERTIFICATION BEPOS EFFINERGIE 2013
A pilot certification that can be awarded in the short term; it builds on the 2012 thermal regulations and the Effinergie+ certification. Above all, the building must respect the criteria of the Effinergie+ certification and must also be the subject of an evaluation of the grey energy and the potential of eco-mobility.

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

CERTIFICATION NF HIGH ENVIRONMENTAL QUALITY (HQE) TERTIARY BUILDINGS
Enables to discern between buildings where the environmental and energy performance corresponds with best existing practices. It concerns the phases of the programming, the conception and delivery for new and renovated housing units.

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

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

CSRPN
The Regional Scientific Council for Natural Heritage (CSRPN) is a body of specialists under the authority of the regional prefect and the president of the regional council which may be consulted on questions on the knowledge, conservation and management of the regional natural heritage.

DHW
Domestic Hot water.

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

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.

EVERGREEN PARKING
Alternative parking space with integrated rainwater management: it drains and limits surface run-off.

FREE-COOLING
Cooling mechanism consisting of using outside air to cool a room and equipment.

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

ÎLE-DE-FRANCE GREEN SPACES AGENCY (AEV)
In the design and implementation of development projects for Île-de-France's natural areas, the AEV links these regional policies and tools with a more local and partnership-based approach via the Regional Land Intervention Areas (PRIF).

INCET
Building contractor responsible for technical analyses for all trades, construction economics and environmental expertise.

INDOOR AIR QUALITY A+
According to the regulation dated 1 September 2013, indoor construction products must be labelled for indoor emissions of pollutants. There are four classes: A+; A; B; C. Here, A+ corresponds to formaldehyde emissions of less than 10µg/m^3.

"LABEL BBC EFFINERGIE" FOR RENOVATION
This label concerns renovated residential buildings, with an objective of a maximum primary fixed energy consumption of 80 kWh/m^2.year, adjusted for the climatic zone and altitude. In Île-de-France, a coefficient of 1.3 must be applied to this objective.

"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/m^2/year for housing with an intermediate level of 45 kWhep/m^2/year until 2014. "Effinergie" + also requires a Bbio (bioclimatic needs)) 20% lower than the BBio set by the 2012 RT The requirement in terms of air permeability are also higher than the BBC label.

M5/F7/F9 FILTER CLASSES
Classification of air filters. M stands for medium filters and F for fine filters.

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

MPGP
Global public performance contract is a new contractual tool available to project owners since 1 April 2016, the date on which the new texts governing public procurement in French law came into force. As such, the MPGP forms part of the 'palette' of existing contractual arrangements (traditional works contracts, partnership contracts, concessions, etc.) or 'toolbox' desired by the government and legislature at the time of the public procurement reform.

PLI
Rental bridge loan. Targeted at individuals whose income is too high to qualify for HLM (moderate rent housing), but too low to access the private market.

PLU
Local town planning plan.

PLUS
Rental loan for social purposes. Intended for individuals eligible for HLM accommodation (moderate rent housing).

PLS
Rental bridge loan. Targeted at individuals whose income is too high to qualify for HLM (moderate rent housing), but too low to access the private market. The PLS differs from the PLI by the area in which the loaned home is located.

SDAGE
Water development and management master plan.

SURFACE AREA
Floor surface area of a building.

SHON
Net non-usable surface areas.

SUP 2
WHO Recommendations Standard 16 798-3. SUP 2 corresponds to a PM 2.5 particle concentration level below 5 µg/m^3 and a PM 10 particle concentration below 10 µg/m^3.

SUSTAINABLE BUILDINGS IN ÎLE-DE-FRANCE
Assessment of the Ekopolis resource centre based on a collaborative and scalable method under the aegis of local professionals for sustainable buildings.

TCSP
Public transport on own site.

VEHICLE-KILOMETRE
Unit of measurement of traffic corresponding to the movement of a motor road vehicle over a kilometre. The distance taken into account is the length of road actually travelled. The vehicle kilometre is an indicator of the occupancy rate of a road network. It makes it possible to make comparisons between networks and monitor overall changes in traffic.

ZAC
Concerted development zone.

Région îledeFrance

Région Île-de-France
2, rue Simone-Veil
93400 Saint-Ouen
Tél. : 01 53 85 53 85

www.iledefrance.fr
RegionIleDeFrance
iledefrance
iledefrance

Région Île-de-France — Septembre 2025 — Conception graphique : Opixido — Mise en page : Agence Bathyscaphe - www.agence-bathyscaphe.fr — Photos : Région Île-de-France ; DR — Impression : Région Île-de-France