RÉPUBLIQUE FRANÇAISE
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OFFICE FRANÇAIS DE LA BIODIVERSITÉ

CŒUR VERT DES TARTRES
2021 - 2050

Plantations
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IDENTITY CARD

GEOGRAPHICAL LOCATION
Plaine Commune conurbation (93)

TARGET ADAPTATION ISSUE(S)
- **Respond to the needs of the residents of a densely populated urban area for natural surroundings by mitigating the effects of global warming and restoring ecological habitats.**

HABITAT(S) CONCERNED
Urban biodiversity

TYPE(S) OF NBAS
Restoration of ecosystems: creating a 2-hectare park combining open habitats, cool leafy areas and places for socialising in an urban environment lacking open spaces.

PROJECT LEADER(S) AND ASSOCATED PARTNER(S)
- **Public territorial institution (EPT) Plaine Commune, Greater Paris**
- Nature 2050 Programme – CDC Biodiversité
- Municipality of Stains
- Local public utility (SPL) Plaine Commune Développement
- Greater Paris Metropole (MGP)

FUNDERS AND BUDGET
Nature 2050 funding - MGP call for projects : 250 000 €

Self-funding : 87 310 €

Total project budget : **337 310 €**

Plus the cost of sustaining and monitoring the project until 2050, to be covered by Plaine Commune and CDC Biodiversité.

plaine commune GRAND PARIS

Pedestrian walkway
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PROJECT OBJECTIVES

- **For adapting to climate change :** creating an urban cool island and improving the management of rainwater on the site.
- **For biodiversity :** strengthening the urban green network and maintaining ecological continuities.
- **For the local area :** opening up a new natural area for residents.

REGULATORY CONTEXT OF THE PROJECT

- Plaine Commune Territorial Climate-Air-Energy Plan (PCAET)
- Les Tartres Concerted Development Zone (ZAC)
- Stains Natura 2000 site
- Regional Ecological Coherence Scheme of the Ile-de-France region

CONTEXT AND ISSUES

The site of Les Tartres spans three municipalities in Seine-Saint-Denis : Stains, Pierrefitte, and Saint-Denis. This area, which was favored for market gardening in the 19th and 20th centuries, gets its name from its topography (a « tertre »). By the end of the 20th century, market gardening activities had gradually diminished, giving way to informal family gardens, equipment storage activities, and a largely polluted wasteland. In 2011, the concerted development zone (ZAC) of Les Tartres was created to enhance this significant site. Despite the severe soil degradation and ecological impoverishment, the site was identified as being of ecological interest in the Regional Ecological Coherence Scheme of the Ile-de-France region(SRCE) and also as a nucleus of secondary biodiversity and an intersection of the east-west and north-south ecological continuities in the Plaine Commune Green and Blue Network. An ecological survey was carried out in 2018 by Urban Eco and detected the presence of many bird species characteristic of open and wooded habitats.

The territorial public institution (EPT) Plaine Commune is tasked with implementing and piloting this comprehensive development project, which includes the creation of 22 hectares of public spaces for the development of a mosaic of habitats, while extending the agricultural purpose of the site. For the development of the green heart of approximately 2 hectares in Plaine Est, the EPT has received support from the Métropole du Grand Paris and the Nature 2050 program as a winner of the 2019 edition of their joint call for projects.

The project led by Plaine Commune won a prize in the 2019 edition of the « Nature 2050 – Greater Paris Metropole » call for projects and therefore benefited from support that enabled its implementation and integration into the Nature 2050 programme.

ACTIONS IMPLEMENTED

Begun in 2021, the aim of the project is to create a large, open-access, multi-purpose grassy area for local residents and a wooded, more protected area to encourage biodiversity. The objective is to reconcile open habitats (mowed grassland, parkland), dedicated to sports activities and relaxation, with a natural area made up of wooded and shrubby habitats, and woodland edges.

- An open parkland for leisure activities, predominantly raye gras and fescue, plus a range of flowery areas to encourage differentiated management;
- A mesophile grassland studded with birch and hornbeam groves favourable to insects, birds and small mammals;
- A meso-hygrophilous grassland with a wetter area enabling the infiltration of rainwater;
- 5 350 m^2 of tree hedges, predominantly oak, creating a particularly shrubby woodland edge favourable to pollinisers, and with 3 300 m^2 inaccessible to the public;
- A berms and hedgerows;
- orchards, predominantly with varieties local favourable to town birds and also rarer species such as Tawny Owl.

GOVERNANCE ADOPTED

For designing the project and defining the monitoring indicators until 2050, the Municipality was supported by the CDC Biodiversité team via the programme Nature 2050 and by the Greater Paris Metropole. Two companies were commissioned to carry out the works (Colas and Loiseleur).

SCHEDULE

	PROJECT LIFESPAN		
	2021	**2022 - 2023**	**2023 - 2050**
Works	Preparation of the soil	Layout, planting operations and opening of the park	
Monitoring and assessment			Monitoring and assessment of Nature 2050 programme indicators

BENEFITS AND CONTRIBUTIONS OF THE PROJECT

BENEFITS REGARDING TARGETED ADAPTATION ISSUES

- Summer cooling provided by shade and evapotranspiration from trees and shrubs, in addition to the presence of damp habitats such as wet meadows, meso-hygrophilous grassland and ponds.

BENEFITS FOR BIODIVERSITY

- Multiplication of habitats favourable to animal and plant species.
- Maintenance of north/south and east/west continuities throughout the local area, underlining its position as a nucleus of secondary biodiversity between Butte Pinson and Georges Valbon Park.

OTHER BENEFITS

- Increasing local people's well-being and quality of life.
- Improving the water filtering capacity, thus de-clogging the rainwater network, and improving air quality through the absorption of pollution by trees.

Site of the Coeur vert des Tartres
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MONITORING INDICATORS

Adaptation to climate changes

- Evolution/maturity of the ecosystem : measurements to assess the health of the soil and the natural abundance rate of Nitrogen 15 in the leaves
- Photographic monitoring

Biodiversity

- Propage protocol monitoring
- Urban grassland flowers
- Tree management (tool being created)

Other

- Influence/awareness-raising
- Georeferencing of damage (« Bien vu » system)

LEVERS FOR SUCCESS

TECHNICAL ASPECTS AND PROJECT DESIGN

- **Soil :** re-forming of brunisols under the hedges to develop a thick layer of mull-type humus favourable to endogenous biodiversity and carbon capture. Restoration of neoluvisols in the sector of the meadow by deeply compacting the soil present and adding more clayey and humus-rich earth to enable the development of vegetation close to the cool areas of the floodplain. Treatment of pockets of pollution in agricultural sectors by adding topsoil.
- **Favour indigenous species :** revegetating using a mixture of indigenous herbaceous species and fruiting species favourable to wildlife. The labels « Végétal Local » and « Vraies Messicoles » can help in deciding. In the summer of 2022, a watering ban during the drought severely impacted the plantings, resulting in significant losses. The dead trees were replaced with a particular focus on selecting species that had best withstood water stress.
- **Encouraging wildlife :** setting up appropriate features such as drystone walls or piles of wood in the hedge to serve as hibernacula for small fauna.
- **Setting up permeable fences :** 15 cm X 15cm crossing point at ground level; vertical posts with picket fencing or firmly attached large-mesh rigid wire fencing, with a 10 to 20 cm gap between the ground and the bottom of the fencing to enable small fauna to cross.

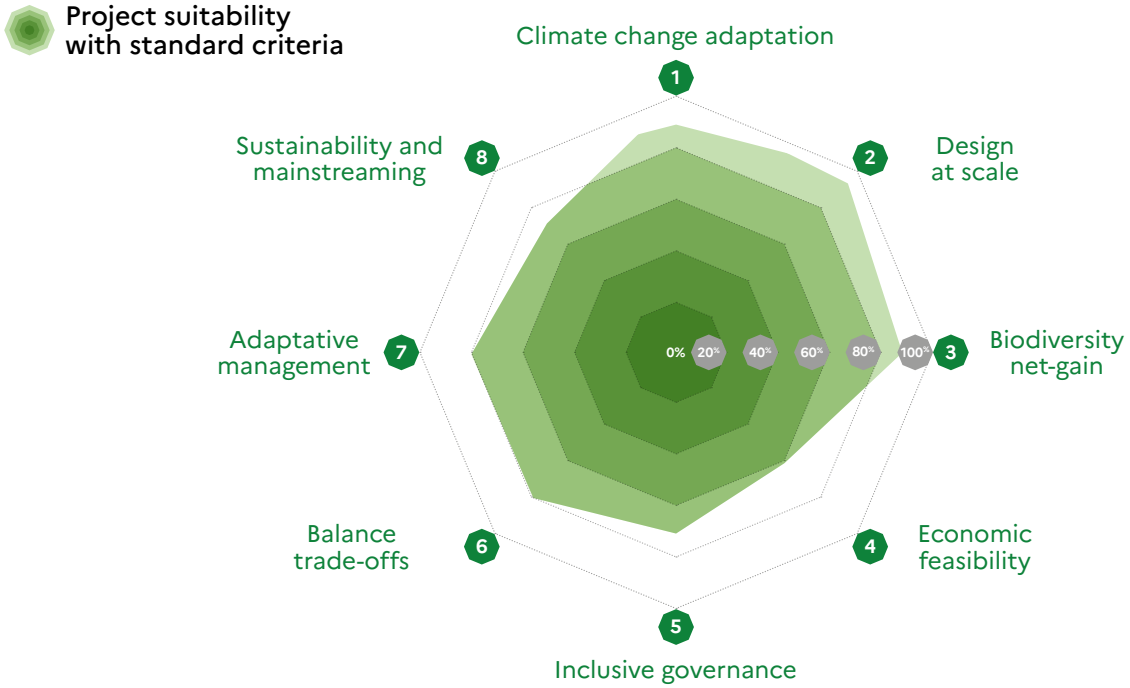
STAKEHOLDER COMMITMENT

- **Safety concerns :** the works were interrupted in 2022 because of vandalism and aggression towards the people working on the site. In 2023, a consultation with stakeholders (local authorities, the prefecture, the SPL, and the project manager) took place to ensure the safe completion of the work. The implementation of passive safety measures, close governance and communication among all parties involved, as well as increased awareness among local residents, are essential to prevent such incidents.

MONITORING AND REPLICABILITY OF THE ACTION

- **Extensive management of the wooded areas :** weeding around the saplings for 5-6 years to avoid competition with spontaneous species. Afterwards, only pruning to shape the young trees so as to achieve a dense, low shrubby layer. Rotary slashing every 5 years in autumn between the rows. Thinning could be required after 15 years.
- **Perspective of the project :** the objective is, by 2027, to provide a new living space for the local area, combining nature areas, agricultural activities, family allotment gardens, and areas for leisure activities and relaxing.

ANALYSIS ACCORDING TO THE IUCN'S GLOBAL STANDARD FOR NATURE-BASED SOLUTIONS



FOR FURTHER INFORMATION

- Webpage (in French) of the Nature 2050 programme
- Webpage (in French) of the Town of Stains

CONTACT DETAILS OF THE PROJECT LEADER

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DATE

March 2023
January 2024

DATE AND FACT FILE EDITOR

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artisan
Le climat change, adaptons-nous avec la nature