METHODOLOGY FOR ASSESSING THE NET POSITIVE IMPACT ON BIODIVERSITY

Office Property Investment Division

Towards a net positive impact on biodiversity

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This document comprises the following paragraphs:

Introduction

At a time when one million plant and animal species are at risk of extinction (and 25% of species in France)[1], Icade has reaffirmed its commitment to protecting biodiversity, which it considers to be a priority and a way to make its assets more appealing.

Icade has implemented a strategy in favour of a net positive impact on biodiversity that improves the environment and well-being of its inhabitants, making cities more resilient in the face of climate change. Icade has once again shown its commitment by joining the "Business for Nature – Act4Nature France" initiative launched by the French Ministry for Ecological and Inclusive Transition. This platform will group the commitments made by French companies in preparation for the IUCN[2] World Conservation Congress to be held in June 2020. This is a decisive step before the UN Convention on Biological Diversity is held in China in December 2020 and establishes biodiversity guidelines to 2030.

A number of Icade's business activities have an impact on biodiversity, including land selection and acquisition, building design and construction, building operation and landscape maintenance. These activities contribute to the expansion of built-on land, although this impact is mitigated in that new construction projects managed by Icade are partially developed on land that has already been built upon. Potential damage could also stem from light and sound pollution, fragmented habitats, soil sealing and soil pollution. Icade's activities may impact ecosystem diversity, wildlife mobility, the genetic mixing of species and emergence of new species. This could spread pest species and disrupt natural cycles in ecosystems.

Icade makes every effort to prevent, reduce and offset any adverse impacts on biodiversity over the building life cycle. It is not only a question of creating green space in an urban setting for the sake of landscaping, but also of preserving biodiversity in addition to creating new urban ecosystems.

This document sets out the methodology for assessing the net positive impact on biodiversity associated with the operational phase of the business parks and green spaces owned by Icade. This indicator is determined and measured as part of the biodiversity performance contract entered into between the Office Property Investment Division and CDC Biodiversité. CDC Biodiversité is a subsidiary of the Caisse des Dépôts, entirely dedicated to promoting biodiversity and its long-term management.

A net positive impact on biodiversity is defined as positive change in a set of ecological criteria relating to plant and animal life, soil, water and landscape maintenance. Icade is committed to ensuring that 25% of its business parks achieve a net positive impact on diversity by 2020, and 50% of the business parks by 2022.

In 2016, Icade entered into a biodiversity performance contract with CDC Biodiversité in order to meet these objectives.

1. Biodiversity performance contract

This innovative initiative aims to introduce nature into cities while improving the quality of life of Icade's business park users. It features measurable resource and performance indicators with respect to plant and animal life, biological diversity, lower use of chemical soil amendments and phytosanitary products in green spaces.

The scope of the analysis conducted in 2019 as part of the biodiversity performance contract includes the Portes de Paris business park located in the cities of Saint-Denis and Aubervilliers (Seine-Saint-Denis) and the Orly-Rungis business park located in Rungis (Val-de-Marne).

It covered 100% of the total area of Icade's business parks with green spaces at the end of 2019. These two business parks, with different ecological characteristics, are assessed separately with the results presented below for each park.

The results of the first assessments conducted in both business parks in 2014 will be used as baseline for both parks. The most recent assessments were carried out in 2019. These two analyses will be repeated for 2020 and 2022 to measure the extent to which the objectives have been met.

2. Definition of "net positive impact on biodiversity"

The biodiversity performance contract makes it possible to monitor, for each business park, 18 indicators used to measure the "net positive impact on biodiversity". The methodology was revised in 2019 after identifying areas of improvement for some indicators (insufficiently detailed protocols, overly complex or simply inadequate indicators) in order to prioritise the most relevant indicators. Some indicators were redefined or refined. For instance, the indicator "number of invasive plant species" was replaced by the indicator "invasive plant species as a % of total land area", which is more relevant for measuring the impact on biodiversity. The indicators were calculated for 2019 and retroactively for 2014 based on the ecological studies carried out at that time.

These 18 indicators for monitoring the net positive impact on biodiversity include 9 performance indicators and 9 resource indicators.

Icade and CDC Biodiversité have defined "net positive impact on biodiversity" as follows:

- 100% of resource indicators have improved or remained stable at an optimal level;
- 50% of performance indicators have improved or remained stable at an optimal level.

These indicators do not have the same objective due to the fact that Icade is entirely responsible for resource indicators while performance indicators depend partly on external factors. Performance indicators were nonetheless included in the definition of "net positive impact on biodiversity", even though Icade is not solely responsible for them, so as to include the notion of "final impact" in the definition.

As a result, Icade must meet this definition of a "net positive impact on biodiversity" for 25% of its business parks to reach its objective by 2020 and for 50% of its business parks by 2022.

(1) 2019 Global Assessment Report on Biodiversity and Ecosystem Services, IPBES.

(2) International Union for Conservation of Nature.

3. Monitoring indicators and 2019 results

The last analyses conducted in 2019 showed that 100% of Icade's business parks have a net positive impact on biodiversity: 100% of resource indicators and over 50% of performance indicators showed positive change in both business parks, as detailed in the tables below. This means that Icade has surpassed its objective and will maintain its efforts to continue this trend in the coming years.

3.1. Portes de Paris business park

Resource and performance indicators for the Portes de Paris business park are shown in the following table:

Themes	Indicators	Units	2014 results	2019 results	Change between 2014 and 2019	Target progress for 2020 vs. base year 2014
PERFORMANCE INDICATORS						
Green spaces	Green spaces as a % of total land area	%	8%	7%	↓	↑
Natural habitats	Number of natural habitats	Number	4	7	↑	↑
Trees	Native tree species(1) as a % of total species	%	10%	11%	↑	↑
Shrubs	Shrubs as a % of green spaces area	%	2.1%	2.4%	↑	↑
Shrubs	Native shrub species(1) as a % of total species	%	55%	50%	↓	↑
Herbaceous plants	Native herbaceous plant species(1) as a % of total species	%	83%	71%	↓	→
Birds	Number of nesting bird species	Number	20	21	↑	↑
Butterflies	Number of butterfly species	Number	9	2	↓	↑
Invasive plant species	Invasive non-native plant species as a % of total land area	%	< 5%	< 5%	→ ★	→
	Total % of performance indicators showing positive change (consistent with target progress)				56%	> 50%
RESOURCE INDICATORS						
Wildlife habitat improvements	Number of micro-habitats and wildlife habitat improvements per hectare	Number/hectare	0.03	0.34	↑	↑
Dead wood left on site	Number of trees with micro-habitats per hectare(2)	Number/hectare	0.03	0.23	↑	↑
Mulched soil	Mulched area as a % of total land area	%	10%	100%	↑	↑
Inputs	Use of chemical soil amendments in green spaces	%	0%	0%	→ ★	→
	Use of chemical plant protection products in green spaces	%	0%	0%	→ ★	→
Level of landscape maintenance	Low-maintenance green spaces or very low-maintenance green spaces(3) as a % of total land area	%	30%	90%	↑	↑
Landscape maintenance staff training	Number of hours landscape maintenance staff are trained in sustainable landscape maintenance(4)	Number/year	0	84	↑	↑
Internal awareness-raising	Number of awareness-raising measures taken per year	Number/year	0	1	↑	↑
External communications	Number of external communications made per year	Number/year	0	3	↑	↑
	Total % of resource indicators showing positive change (consistent with target progress)				100%	100%

★ *Indicator stable at optimal level*

(1) A native species is one which has existed naturally for a very long time in the biogeographic region in question. These species play an optimal role in supporting regional biodiversity by meeting the needs of animal species throughout their life cycle, which is not necessarily the case with non-native species.

(2) Dead wood constitutes a specific natural micro-habitat which may support a rich and distinctive array of biodiversity. Examples of trees with micro-habitats are: dead trees left standing or felled and left on the ground, stumps, etc.

(3) Low-maintenance green spaces are used to create a "country garden" effect. Very low-maintenance green spaces promote the development of natural habitats, rather than aesthetic or practical features. These levels contrast with the usual high-maintenance green spaces, which require regular and frequent cutting, trimming, pruning, etc.

(4) Sustainable landscape maintenance can be divided into three levels: high, low and very low.

3.2. Orly-Rungis business park

Resource and performance indicators for the Orly-Rungis business park are shown in the following table:

Themes	Indicators	Units	2014 results	2019 results	Change between 2014 and 2019	Target progress for 2020 vs. base year 2014
PERFORMANCE INDICATORS						
Green spaces	Green spaces as a % of total land area	%	11%	20%	↑	↑
Natural habitats	Number of natural habitats	Number	4	7	↑	↑
Trees	Native tree species(1) as a % of total species	%	21%	22%	↑	↑
Shrubs	Shrubs as a % of green spaces area	%	20%	19%	↓	↑
Shrubs	Native shrub species(1) as a % of total species	%	22%	24%	↑	↑
Herbaceous plants	Native herbaceous plant species(1) as a % of total species	%	N/Av.	73%	N/Av.	↑
Birds	Number of nesting bird species	Number	14	24	↑	↑
Butterflies	Number of butterfly species	Number	N/Av.	5	N/Av.	↑
Invasive plant species	Invasive non-native plant species as a % of total land area	%	<5%	<5%	→ ★	→
	Total % of performance indicators showing positive change (consistent with target progress)				67%	>50%
RESOURCE INDICATORS						
Wildlife habitat improvements	Number of micro-habitats and wildlife habitat improvements per hectare	Number/hectare	0.0	0.5	↑	↑
Dead wood left on site	Number of trees with micro-habitats per hectare(2)	Number/hectare	0.00	0.06	↑	↑
Mulched soil	Mulched area as a % of total land area	%	0%	100%	↑	↑
Inputs	Use of chemical soil amendments in green spaces	%	0%	0%	→ ★	→
	Use of chemical plant protection products in green spaces	%	100%	0%	↓	↓
Level of landscape maintenance	Low-maintenance green spaces or very low-maintenance green spaces(3) as a % of total land area	%	5%	37%	↑	↑
Landscape maintenance staff training	Number of hours landscape maintenance staff are trained in sustainable landscape maintenance(4)	Number/year	0	49	↑	↑
Internal awareness-raising	Number of awareness-raising measures taken per year	Number/year	0	2	↑	↑
External communications	Number of external communications made per year	Number/year	0	6	↑	↑
	Total % of resource indicators showing positive change (consistent with target progress)				100%	100%

N/Av.: Not available ★ *Indicator stable at optimal level*

(1) A native species is one which has existed naturally for a very long time in the biogeographic region in question. These species play an optimal role in supporting regional biodiversity by meeting the needs of animal species throughout their life cycle, which is not necessarily the case with non-native species.

(2) Dead wood constitutes a specific natural micro-habitat which may support a rich and distinctive array of biodiversity. Examples of trees with micro-habitats are: dead trees left standing or felled and left on the ground, stumps, etc.

(3) Low-maintenance green spaces are used to create a "country garden" effect. Very low-maintenance green spaces promote the development of natural habitats, rather than aesthetic or practical features. These levels contrast with the usual high-maintenance green spaces, which require regular and frequent cutting, trimming, pruning, etc.

(4) Sustainable landscape maintenance can be divided into three levels: high, low and very low.

4. Improvements observed in 2019, and 2020 action plan

Based on the latest study conducted in 2019, 100% of resource indicators and over 50% of performance indicators showed positive change or remained stable at an optimal level in both business parks. For example, the amount of green space in the Orly-Rungis business park jumped by 81% and the number of natural habitats surged by over 75% in the two business parks. Several new species have been observed: the small-flowered buttercup (protected species), the bee orchid and the common wall lizard. This progress was made possible thanks to measures implemented to improve landscape maintenance practices: 0% of chemical phytosanitary products used, 100% of mulched areas, landscape maintenance staff training, communication campaigns, etc. Efforts will continue to maintain a net positive impact on biodiversity on the sites through the implementation of a sustainable landscape maintenance plan that is adapted to the specificities of each environment, by introducing plants, higher-cut grassed surfaces allowed to grow for longer periods, reducing cutting and watering, etc.

5. Outlook: moving towards a common indicator to monitor positive biodiversity impacts

Member of the Business for Positive Biodiversity Club (B4B+ Club) led by CDC Biodiversité, Icade has been involved in creating the Global Biodiversity Score (GBS), a standardised indicator to quantify a company's impact on biodiversity, in collaboration with companies, associations and researchers. Scheduled for 2020, this tool seeks to measure the biodiversity footprint of companies regardless of their business sector.

This new indicator will also improve the measurement method implemented in connection with biodiversity performance contracts.