BIODIVERSITY OASIS REPORT



Release: [2023]

LACISA



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L'impatto sul territorio



RECAP OF SUPPORTED PROJECTS







BIODIVERSITY OASIS REPORT Partner: [LA CISA] Release: [2023]





COMPANY-OWNED FOREST

- What they are and why they are important
- The impacts on the Sustainable Development Goals (SDGs) of the 2030 Agenda
- How to include them in the ESG report
- The details of your forests



Actions on biodiversity

The loss of **habitats** and **biodiversity** represents one of the most significant challenges that everyone is required to participate in, as recognized in the **UN 2030 Agenda** (1).

The reasons behind this include land consumption, pollution, the intrusion of invasive species, and climate change, in all of which humans play a key role.

Thanks to the "**Adopt a Nectar-rich Forest**" project - a part of the Biodiversity Oasis project - it is possible to contribute by supporting the growth of plants with high nectar-producing potential.

The Importance of Nectar-Producing Plants

Nectar-producing plants, often referred to as "nectar-rich", are vital for biodiversity as they attract and nourish pollinators. This dynamic supports **plant diversity through pollination**, which is essential for plant reproduction and propagation. Furthermore, by sustaining a **healthy ecosystem of pollinators, these plants promote animal diversity**.

Their contribution in terms of **CO2 absorption** should also not be overlooked, as it is crucial for climate change mitigation (9).



The selection criteria

Plants are selected based on specific criteria: they must be **native** to promote local adaptation and ecological resilience; they must provide **staggered blooming** periods to ensure a continuous source of nourishment for pollinators; and lastly, they must be represented by at least **three different species** to support and promote plant biodiversity.



Flora and Spectrum

In addition to contributing to the formation of an interconnected network of forests, we are participating in the construction of one of the largest technological monitoring networks in Europe, a crucial step for biodiversity research and conservation.

Specifically, we are supporting the use of **Flora**, a tool developed in collaboration with the European Space Agency, which uses satellite data to monitor the ability of territories to host pollinators. In parallel, we are contributing to the development of **Spectrum**, an innovative Internet of Things (IoT) tool that uses bioacoustics to detect and identify pollinators in an area.

These tools, combined, enable unprecedented **monitoring** and provide valuable data for research and conservation efforts related to bees and other pollinators.



The results you are supporting

through your adoption

Establishment of the **largest private biodiversity protection network** (data as of 30/6/2023)



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AGENDA 2030

4 QUALITY EDUCATION

Project communication with stakeholders contributes to raising awareness about pollinator protection, biodiversity conservation, and ecosystem preservation. Raising awareness is the most effective tool to combat biodiversity loss, as it leads consumers to make more informed choices.

The planting and management of forests contribute to regenerating a healthy ecosystem and improving soil quality, thereby ensuring greater water retention and better purification from pollutants. This also contributes to a proper local water cycle. **6** CLEAN WATER AND SANITATION





Embracing sustainability and biodiversity conservation projects, coupled with effective communication, can lead to indirect growth of the company through increased attractiveness of the company itself and its products, as well as establishing its brand as a leader in the industry.

The integration and regeneration of ecosystems, even in urban environments, lead to a reintegration of the natural component in cities, enhancing their livability and restoring ecosystem services through the return of flora and fauna to urban areas.



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Restoring pollinator habitats leads to more sustainable and responsible food production. Protecting pollinators contributes to adequate production through natural ecosystem services, avoiding the need for artificial interventions to compensate for any deficiencies.





AGENDA 2030

The planting and management of a nectar-rich forest lead to direct absorption of CO2 emissions. Ecosystem regeneration also results in indirect emission absorption through improved soil bacterial communities. Both of these effects contribute to the fight against climate change.





One of the main issues related to biodiversity loss is the loss of habitats. Therefore, regenerating an ecosystem by planting a nectarrich forest where there was once cultivated land strongly contributes to SDGs 15, as it leads to the resurgence of biodiversity within it, providing refuge to numerous species, not only pollinators.

To contribute to the ecological transition, a combined approach of existing solutions and projects like "Adopt a Nectar-Rich Forest", which addresses the aforementioned SDGs, is necessary.







SUSTAINABILITY REPORTING STANDARD

With the new European Corporate Sustainability Reporting Directive (**CSRD**), companies will be **required** to report their environmental, social, and governance **impacts**. Environmental aspects include those related to **Biodiversity**, both positive and negative.

Companies required to **report** will be those exceeding at least 2 of these 3 thresholds:

- More than 250 employees
- More than 40 million euros in revenue
- More than 20 million euros in total assets

In addition to being more stringent, the regulation will compel many sectors to report on the topic of **Biodiversity**.



The "**Adopt a Nectar-Rich Forest**" project falls under biodiversity-related projects and can be included within the following standards:

GRI Standards (Global Reporting Initiative Standards)		SASB (Sustainability Accounting Standards)
Point	Subpoint	Ecological Impacts
203 - Indirect Economic Impacts	203-1	Human Rights and Community Relations
303 - Water and Effluents	303-1	Resilient Business Model
304 - Biodiversity	304-1 304-2 304-3 304-4	Air Quality
305 - Emissions	305 - 1	Greenhouse Gas Emissions
404 - Training and Education	404-1	Physical Impacts of Climate Change
4013 - Local Communities	413-1 413-2	Employee Health and Safety



Forest Name: Gaminara

Location: Lombardia 50 Trees: Field Maple 5, Cherry tree 5, Dogwood 5, Major ash 5, Southern Ash 5, Wild Apple Tree 5, Hazelnut 15, Orno 5

Indices and Analyses



Nectar Production



CO2 Absorption



Description

The nectar potential of a forest is calculated by summing the contribution of each individual tree. Data from scientific literature indicating the nectar yield of each tree species and their flowering timing are used for this purpose.

This information helps determine how many pollinators a forest can support. Actual nectar consumption can vary depending on various factors, including pollinator species, age, behavior, and environmental conditions.

Assuming a consumption of 317 kg of nectar per year (with 50% sugar content) for a beehive of 50,000 bees, each bee consumes an average of 6 g of nectar per year. It can then be estimated that **each kg of nectar supports approximately 200 bees in 1 year** (10).

Description

The amount of CO2 absorbed by each tree is calculated using scientific data on the **CO2 absorption of each species.** This calculation excludes the components stored underground (11, 12, 13, 14).

The total CO2 absorption is estimated for a period of 10 years, which is considered the tree's maturity period, and this contribution is **evenly distributed over the entire lifespan of the tree.**



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