

Registration Form

ACI Latin America and Caribbean Green Airport recognition 2025



Submission deadline: September 5, 2025

ACI-LAC will send an acknowledgment of receipt via email after receiving each form.

• Participating Airport Information

Name: Floripa Airport

Airport Group (if applicable): Zurich Airport Brasil

Full name: Anderson da Silva Pinheiro

Position: Engineering, Maintenance, Infrastructure and Sustainability Manager

Email: meioambiente@zurichairportbrasil.com

Project's name: Sustainable Bee Management

Project website (if applicable):

• Official/Alternate Representative for ACI-LAC

Signature of the official/alternate representative for ACI-LAC:

Full name: Artemis Papanika

Position: COO

Email: artemis.papanika@zurichairportbrasil.com

• Recognition conditions

I accept that the information provided (executive summary and graphics/images) be published at the discretion of ACI-LAC.



Biodiversity and Nature-Based Solutions (NbS)

The **Green Airports Recognition 2025** offers a valuable platform for airports across Latin America and the Caribbean to showcase their successful efforts in biodiversity preservation and the implementation of Nature-Based Solutions (NbS) within the aviation sector. Initiatives may include (but not limited to) wetland restoration and creation, restoring ecosystems, and leveraging NbS for carbon removal. Examples of eligible practices range from in-house horticulture and airport nurseries, plantation for carbon reduction and community benefits, ecological rejuvenation of wetlands, marine life conservation efforts led by airports, and basket of measures for biodiversity.

Important note: Projects currently under implementation are eligible, provided they are mature enough to produce measurable, quantitative outcomes in accordance with the evaluation criteria. **Participating airports or airport groups may submit only one (1) project**

- **Evaluation**

Each application evaluated must meet the following recognition criteria:

- 1. Involvement of the airport's senior management**

Demonstrate active participation and endorsement from airport senior management during any phase of the project's development or implementation.

- 2. Sustainability Benefit**

Detailed description of the sustainability benefits of the project/program supported by quantitative data and objective sustainability indicators where possible.

Indicate the level to which the project contributes to the United Nations Sustainable Development Goals

- 3. Stakeholder Engagement**

Present evidence of collaboration with internal teams and external partners—such as government agencies, NGOs, community groups, or industry stakeholders—in the planning and execution of the initiative

- 4. Innovation**

Demonstrate that the project/program exceeds standard industry practices.

In addition, ACI-LAC will present a *Special Recognition* to the project demonstrating exceptional achievement. To be eligible, the participating airport must hold accreditation at any level within the Airport Carbon Accreditation (ACA) program.

The weighting of the criteria for special recognition is indicated below:

1. Involvement of the airport's senior management (20%)
2. Sustainability Benefit (30%)
3. Stakeholder Engagement (30%)
4. Innovation (20%)

- **Instructions to participate.**

Complete and submit the form with the project information in MS Word and send to fmedela@aci-lac.aero before **September 05, 2025**.

1. Summary Executive (maximum 350 words)

Please include an Executive Summary of the project in a maximum of 350 words. In case your project meets the criteria of the ACI-LAC *Green Airport Recognition*, this Executive Summary will be included in the Best Environmental Practices Document that seeks to promote best practices that minimize the impact of airports on the environment, in addition to recognizing the achievements of airports in the region in their environmental projects.

Bees are among the most essential pollinators on Earth, directly contributing to biodiversity maintenance, ecosystem balance, and global food security. Nearly 75% of food crops depend on their pollination services¹. However, bee populations face increasing threats due to climate change, pesticide use, habitat loss, and other human-driven impacts. This decline has profound consequences not only for natural ecosystems but also for human well-being.

Airports, with their large green areas and varied infrastructure, can become attractive sites for swarming and colony formation. When colonies establish themselves in operational or public areas, they may pose risks to employees, passengers, and essential airport activities. In such contexts, responsible management is vital, not only to ensure safety but also to protect the bees.

The Sustainable Bee Management Project was designed to respond to this challenge. Implemented across the four airports managed by Zurich Airport Brasil (Florianópolis, Vitória, Macaé and Natal Airport), the initiative prioritizes the safe and ecological relocation of bee colonies. Instead of extermination that is the common method used for management in these cases, professional beekeepers apply sustainable, non-invasive, chemical-free techniques to carefully manage and relocate colonies.

The process begins with a detailed risk assessment, followed using natural calming methods to reduce stress and defensive behavior. The queen is then transferred into a prepared hive structure, encouraging worker bees to follow. Finally, the entire colony is relocated to an ecologically suitable environment outside airport premises, ensuring their survival and continuity as pollinators.

This approach protects human health and operational safety while preserving essential ecological services. Many of the relocated colonies have been Africanized honeybees (*Apis mellifera scutellata*), an exotic species whose aggressive behavior and competitive advantage threaten native pollinators. Their careful removal and relocation therefore reduce operational risks and contribute to local biodiversity resilience.

Since its launch in 2021, the project has delivered successful ecological removals at Florianópolis and Vitória airports. Beyond immediate safety benefits, the initiative supports Zurich Airport Brasil's sustainability strategy and contributes directly to UN Sustainable Development Goal 15 (Life on Land), which calls for the protection, restoration, and sustainable use of ecosystems.

This pioneering initiative demonstrates that aviation safety and biodiversity conservation can coexist, setting a replicable model for airports worldwide.

¹ <https://news.un.org/pt/story/2025/05/1848611>

2. Project Background (maximum 150 words)

Please describe the background of the project or program (Why was it necessary to develop this project/program?)

Bee colonies occasionally establish themselves in airport infrastructure and their presence in these locations prevents essential operational activities and poses safety risks to staff and passengers. At the same time, bees are globally recognized as indispensable pollinators, with nearly 75% of food crops depending on their ecological services. Their decline represents a serious environmental concern.

In this context, the project was created in 2021 to address the growing need for bees' preservation and safety in aviation operations. Traditional extermination methods would conflict with Zurich Airport Brasil's sustainability principles and environmental commitments. Therefore, the Sustainable Bee Management Project was developed to ensure that removals are performed through natural, chemical-free techniques, preserving bee populations while securing airport operations.

3. Project scope (maximum 50 words)

Describe the area of implementation of the project, for example: area of operations, terminal, the entire airport, etc ; as well as agents involved in it: airport staff, other *stakeholders* , NGOs , environmental groups, etc.

The project is implemented across all external airport areas at Zurich Airport Brasil's airports. Operational teams including maintenance, operations, infrastructure, safety, and sustainability support the initiative by reporting bee occurrences. The sustainability team coordinates interventions with professional beekeepers, ensuring safe, ecological relocation of colonies in collaboration with environmental stakeholders.

4. Project Description (maximum 100 words)

Describe how the project was implemented.

The bees' relocation process follows structured four steps:

1. Risk identification: The beekeeper assesses the site, bee species, and environmental conditions.
2. Non-invasive calming methods: Natural fumigation techniques reduce defensive behavior and mask alarm pheromones, ensuring safety.
3. Colony relocation: The queen is transferred into a new hive, attracting worker bees.
4. Safe transfer: The colony is securely transported to suitable habitats outside airport premises.

These chemical-free techniques minimize stress, preserve colony integrity, and ensure successful reintegration into ecosystems, aligning airport operations with ecological stewardship.

5. Project results and benefits (maximum 300 words)

Describe the results of the project highlighting its achievements. Please emphasize data, for example: cost savings, recognized environmental benefits, evidence of innovation, etc.

Since 2021, the Sustainable Bee Management Project has successfully carried out five ecological relocations at Florianópolis and Vitória airports. In all cases, the colonies involved Africanized honeybees (*Apis mellifera scutellata*), an exotic species in Brazil that competes aggressively with native pollinators for resources. By relocating these colonies instead of exterminating them, the project not only prevents operational hazards but also helps protect the resilience of local ecosystems.

All interventions were guided by the principle of preservation. No colony was destroyed, every removal was carefully managed to ensure safe relocation. This approach safeguards biodiversity by reducing competitive pressure from exotic species, while simultaneously protecting the health and safety of passengers, employees, and airport operations. The exclusive use of natural, chemical-free techniques ensures that no contaminants are introduced into the environment, reinforcing ecosystem integrity.

Unlike conventional pest control measures, which often rely on elimination, this project demonstrates how wildlife management can be both sustainable and effective for safety and operation.

Aligned with UN Sustainable Development Goal 15 – Life on Land, the initiative advances ecosystem protection and species conservation. By reconciling operational safety with biodiversity stewardship, the Sustainable Bee Management Project highlights Zurich Airport Brasil’s commitment to environmental leadership, operational excellence, and global sustainability goals.

6. Graphics and Images (maximum 4)

Include a maximum of 4 graphs, including tables or photographs, with a brief description. This information will also be included in the Best Environmental Practices Document.



Figure 1. Beekeepers during the sustainable management of bees.



Figure 2. The hive queen being relocated to a new structure, next to the honeycombs.