



Airport Name: Manaus Airports

Airport Group: VINCI Airports

Responsible: Elisabete de Albuquerque Cavalcante, Coordenadora de Meio Ambiente

Project's Name: Circular Economy of Water Resources at Manaus Airport

Resumen Ejecutivo

VINCI Airports has an Environmental Policy focused on the sustainability of processes and environmental protection, with challenging commitments, one of which is to reduce water consumption by 50% by 2030. To achieve these goals, VINCI Airports has made several investments in infrastructure, technologies, operations and other initiatives, promoting safer and more sustainable processes, such as the Reuse WWTP, rainwater collection, among others.

The project aims to use water resources efficiently, moving towards the reuse of rainwater collection, considering that the Manaus Airport is located in an equatorial climate region where the average interval can exceed 300 mm. And also the use of treated effluent, ensuring the recirculation of the resource for the cooling tower systems and toilet flushing systems, which will represent a 44.7% reduction in water consumption throughout the airport complex.

Projects Benefits and Results

The solution will result in an approximate reduction of 336 m³/day of water per day, which represents a reduction in water consumption of 122,640 m³/year over a one-year period. This represents a 58.8% reduction in consumption at the passenger terminal and a 44.7% reduction in water consumption for the entire airport complex.

In 3 years, we will have reduced drinking water consumption by approximately 367,920,000 liters, which represents 147 Olympic-sized swimming pools.

In Manaus, the cost of a cubic meter of water is R\$21.04 – in 3 years, we expect an approximate reduction of R\$7,741,036.08.

Project Cost: R\$ 5,500,000.00

Return on investment period - 0.7 months

The installation of the solution was completed in August 2024 and tests were carried out in September 2024. It is undergoing some final adjustments, with the expectation of official operation in October 2024.

In addition to the reductions in consumption and cost, it is important to emphasize the reduced environmental impacts, such as:

- Reduction of the water footprint: Reusing water in processes reduces the amount of water taken from natural resources, contributing to water sustainability.
- Conservation of water resources: Water capture can reduce the demand for new water sources, especially in regions with limited water availability.
- Preservation of aquatic ecosystems: By reducing water capture from rivers, lakes and aquifers, water capture helps to preserve aquatic ecosystems, including the flora and fauna that depend on these environments.
- Minimizes water pollution: Water harvesting often involves treatment and purification processes, which can reduce pollution of natural water bodies, returning cleaner water to the environment.
- Mitigation of climate impacts: In some regions, water harvesting can indirectly contribute to mitigating climate impacts, including by reducing desertification and preserving wetlands that play an important role in regulating local and global climate.

