

**Airport Name:** Salvador Bahia Airport, Vinci Airports

**Responsible:** Alessandra Pereira dos Reis, Gerente de Meio Ambiente

**Project Name:** Eficiência Energética

## Executive Summary

After the concession of Salvador International Airport to the VINCI group, a project was carried out to reduce carbon emissions associated with energy efficiency and modernization of facilities. The main objective is to reduce energy consumption, since energy consumption is directly linked to carbon emissions and represents around 80% of the airport's CO2 emissions.

Thus, strategies for improving energy efficiency were defined and approved by the board:

- Insulated glazing in the new areas to guarantee thermal comfort and energy efficiency;
- LED lamps throughout the airport;
- BMS system (Building Management System) to improve energy management;
- HVAC-R refrigeration system for greater efficiency;
- Elevators, stairs and moving walkways for greater efficiency;
- Solar power plant providing 30% of the required energy;
- Contracting energy supply from natural sources.

Furthermore, strategies were approved to reduce emissions generated by fuel consumption, such as:

- Electrical equipment to support cargo terminal operations;
- Vehicles powered by biofuel;
- Exclusive lanes for bicycle circulation;
- Encouragement and encouragement of the use of alternative transport, reducing pollutant emissions.

### Project results and benefits

It was possible to observe the following results after implementation:

**Insulated Glass:** Improved efficiency in the refrigeration system, favoring the transmission of natural light, reducing energy consumption in the refrigeration system by up to 10% per year;

**LED lamps:** The lighting system represents 15% of energy consumption, replacing them with LED lamps makes them last 15 to 25 times longer than incandescent ones, generate less maintenance and do not emit ultraviolet or infrared rays, factors that considerably reduce impact on the environment;

BMS system: The installation of equipment and renovation of others allowed a 5% reduction in energy consumption in the passenger terminal;

HVAC-R system: This system represents 60% of the passenger terminal's energy consumption. With the implementation of this project there was a 10% reduction in the TPS's electricity consumption;

Efficient equipment: The equipment was replaced with newer models, automated with proximity sensors, which in the absence of movement near the equipment go into “stand-by”, reducing energy consumption in the passenger terminal by 10%.

Solar Plant: Production capacity of around 6.5 million kWh of clean energy per year.

Since its operation in October 2020, the solar plant has generated around 30% of the airport's consumption, a reduction of around 900 tons of CO2 and a reduction of around 29% in the Airport's OPEX energy. Com todas as ações implantadas para redução de energia e para consumo de combustível foi possível ter resultados significativos para o nosso projeto de eficiência energética, assim fomos considerado o primeiro aeroporto do Brasil a receber a certificação ACA Nível 3 e com redução de 87% das emissões geradas no escopo 1 e 2. Com esse resultado foi possível o atendimento da meta do Grupo Vinci já 2022 para a redução pela metade da nossa pegada antes do prazo estabelecido que é 2030.

