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## LEED CERTIFICATION

The genebank Future Seeds, part of the Alliance of Bioversity International and CIAT, is currently requesting a Leadership in Energy and Environmental Design (LEED) Certification: BD+C v4, New Construction, with the objective of obtaining a Platinum level. The Project is already registered at the US Green Building Council (USGBC) and is currently in the process of documentation.

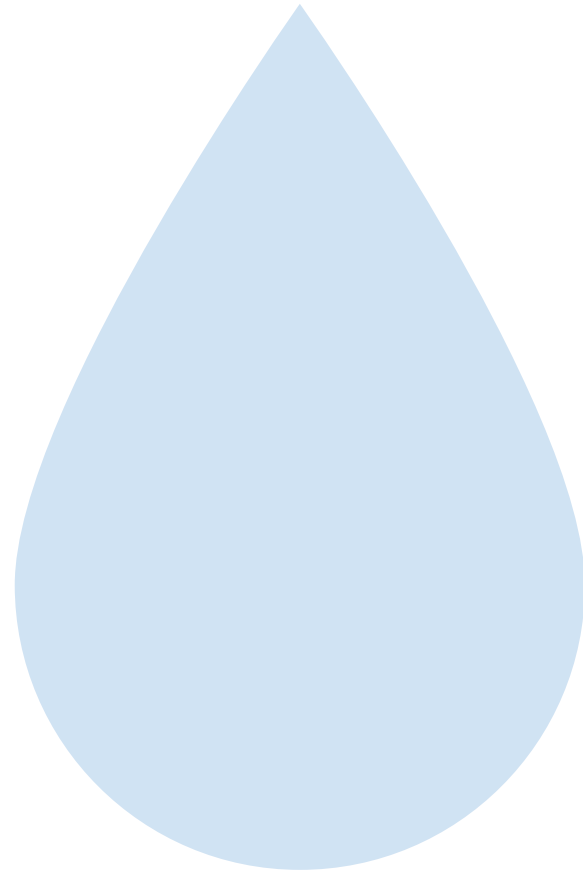
To obtain the LEED certification we planned different sustainability strategies to reduce the impact of the project on the environment, increase the energy efficiency of the bank, reduce water consumption and guarantee the comfort for workers and visitors.

The certification evaluates the performance of the project during the design and construction stages in categories such as location and site, water, energy, materials and air quality, obtaining the results in the following pages.



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# IMPLEMENTED STRATEGIES



## WATER

- 100% of the water consumed in the project is raw or treated water from the rainwater collection system; the roof is the main surface for collection, capturing up to 4,234 m<sup>3</sup> per year.
- The project's black and gray waters are treated and filtered at the site, and excess rainwater is managed internally, to create a closed hydrological cycle, achieving Net Zero.
- The bank has efficient toilets, urinals, showers and taps, generating savings in water consumption.
- The vegetation in the project is native or adapted, which can live with the rain pouring in the region, generating savings in water consumption for irrigation.

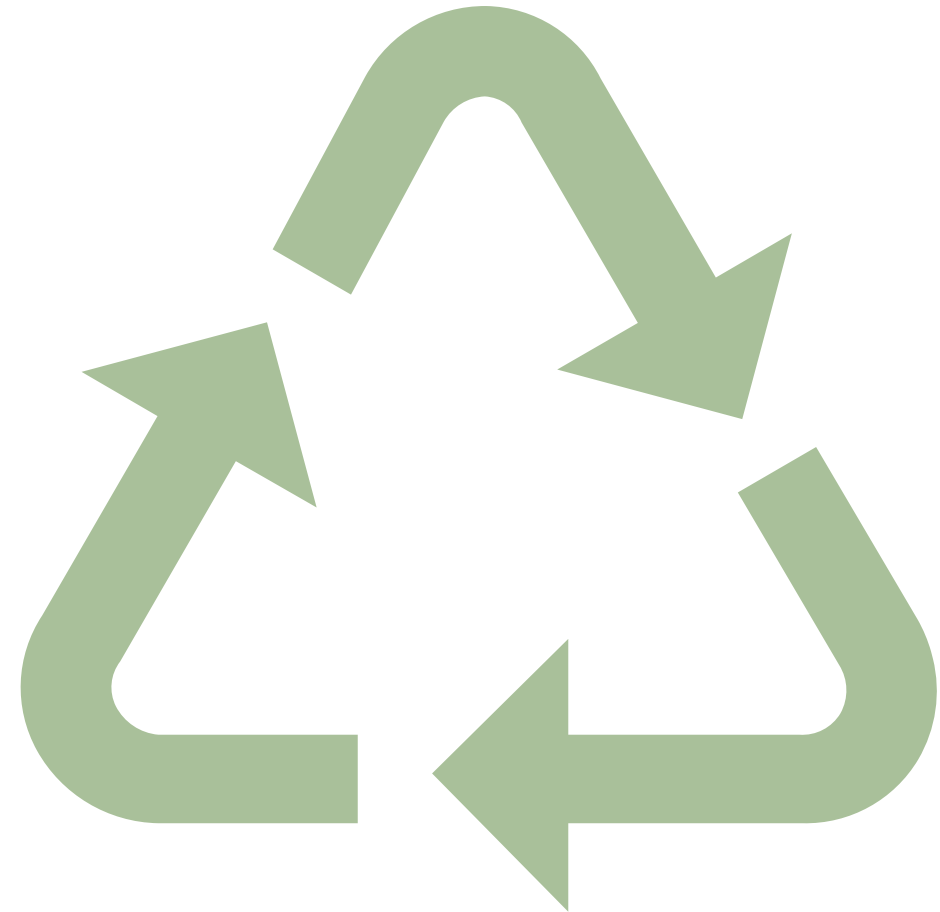


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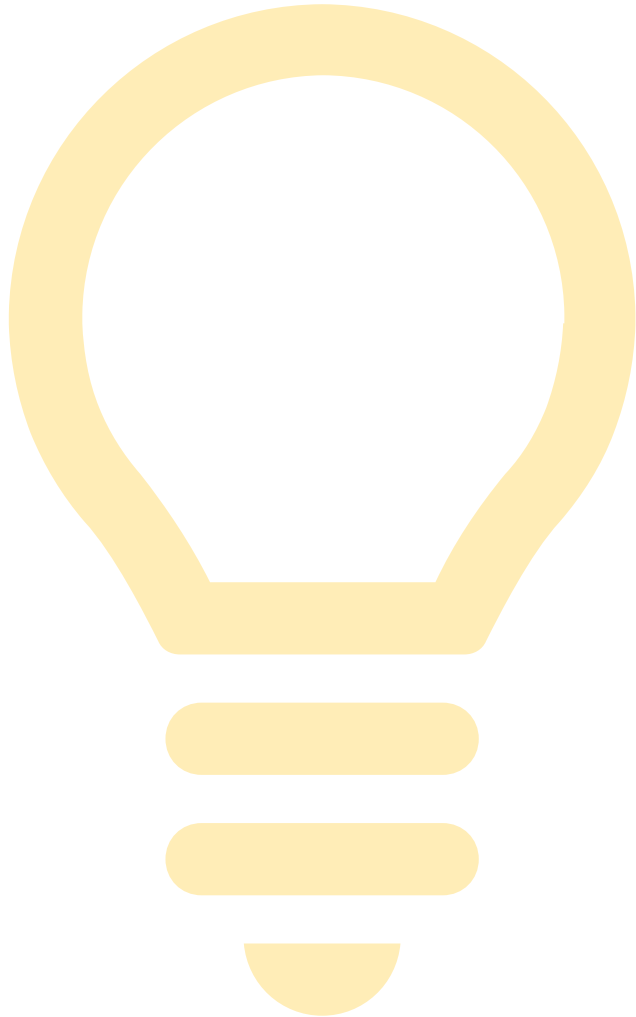
# IMPLEMENTED STRATEGIES

## MATERIALS AND RESOURCES

- During the construction of the bank, more than 90% of the waste generated was recycled or reused, reducing the impact on the environment.
- The bank has a waste storage and a separation room, in order to recycle or reuse most of the waste during operations.
- The wood used for the roof (canopy) is FSC certified.
- During construction, a careful selection of paints, adhesives and sealants was made, always seeking the lowest level of volatile organic compounds (VOC).
- The materials and elements that have water contact do not have ingredients included in the Red List (materials harmful to health), seeking to care for the health of the occupants.



# IMPLEMENTED STRATEGIES



## ENERGY

- More than 40% of the energy consumed by Future Seeds comes from solar panels.
- Only efficient LED-type lights are used in the bank, combined with a lighting control system that reduces energy consumption.
- The bank's facade and roof elements and materials are intended to reduce energy consumption and guarantee the comfort of occupants and visitors.
- The proper design of the bench and the implementation of renewable energies allow savings of more than 54% compared to the baseline for this type of building (ASHRAE 90.1-2010).
- None of the air conditioning equipment uses refrigerants with CFCs, reducing the impact on global warming and protecting the ozone layer. The equipment is highly energy efficient.

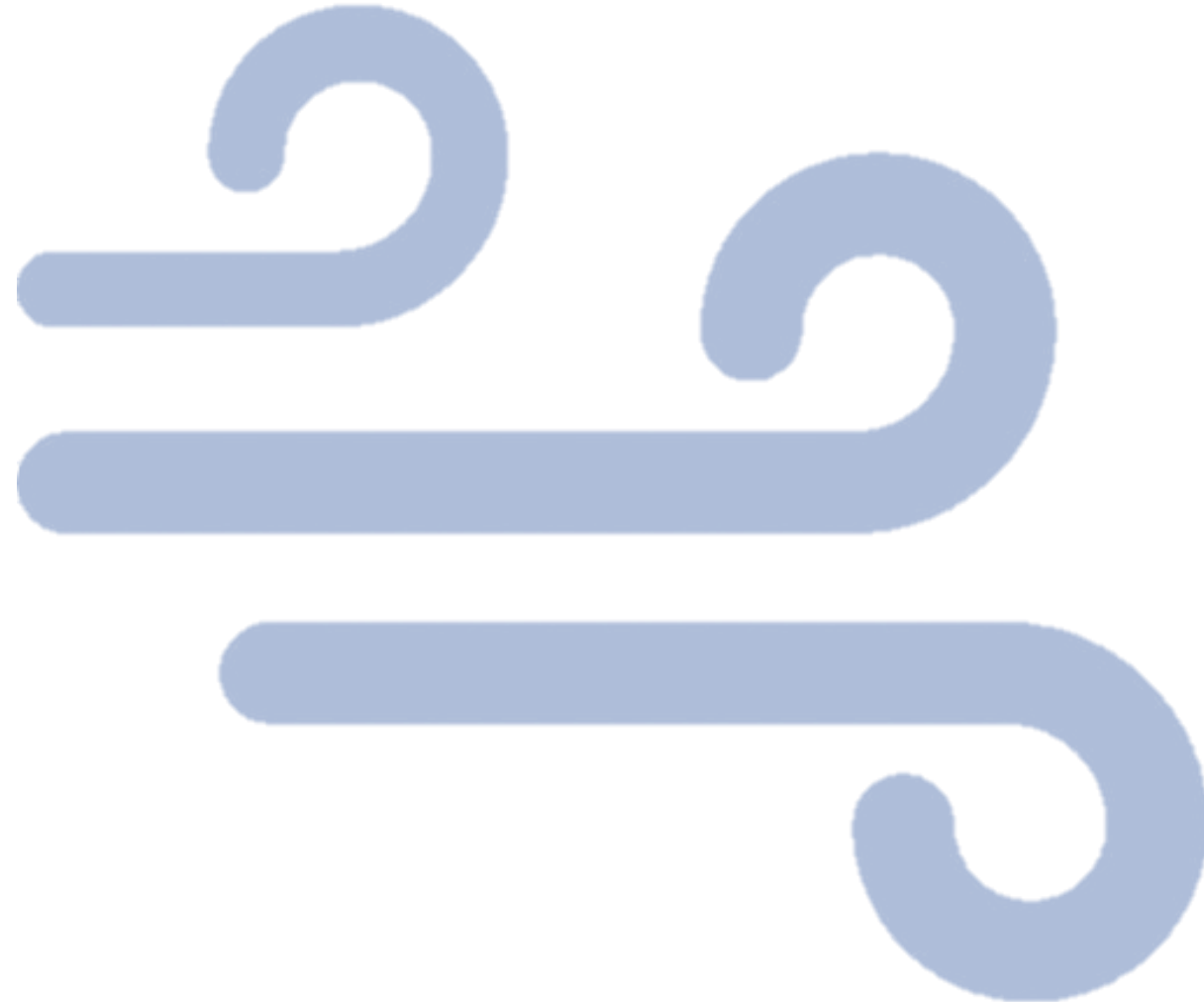


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# IMPLEMENTED STRATEGIES

## AIR QUALITY

- The Bank has a filtered air renewal system that guarantees the quality of the air in any of the occupied space in the building, taking care of the health of the occupants.
- Before people started occupying the site, a cleaning (flush-out) of the air in the buildings was carried out, seeking to eliminate particulate matter and residual contaminants from the construction stage.
- The occupied spaces have monitoring and control systems for temperature and CO<sub>2</sub> levels, in order to improve comfort and protect the health of the occupants.
- The bank is smoke-free, as smoking is not allowed in any of the covered or uncovered spaces.





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# IMPLEMENTED STRATEGIES

## QUALITY OF LIFE

- The lighting system was designed to generate comfort for the occupants, taking into account the internal processes of the bank.
- The area has a bioclimatic design, which allows for controlled thermal gains through the canopy, taking advantage of the benefits of the tropical climate.
- The project provides direct contact with natural elements, reducing stress and improving the comfort of its occupants.
- Different biophilia elements were included in the bank design, creating a direct connection with nature and culture and bringing comfort to users.

