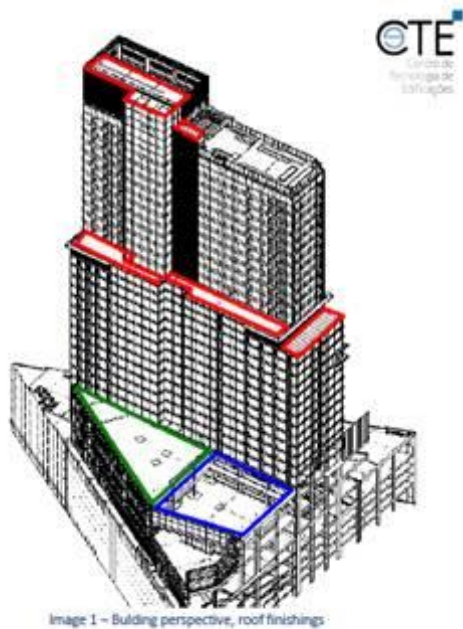
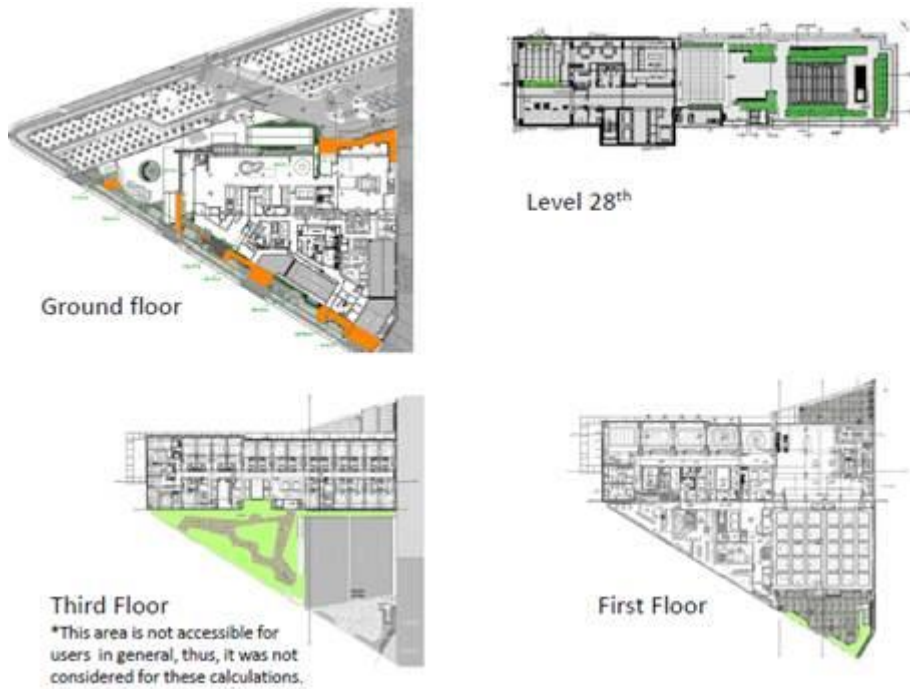


**SUSTAINABLE SITES**

- Easy access to basic services, such as restaurants, markets, schools, banks, gyms and others, and easy movement by public transportation, assuring low impact for the users commuting.
- Bike rack area inside the building, with 60 spaces available, in addition to men and women's locker rooms.
- 1.000 m<sup>2</sup> green area, with native or adapted vegetation, promoting biodiversity and reducing heat islands.



Stábs covered with Membrana Impermeável Baucryl UV Branco da Quimicryl\*\* = 8,934.05 sf.

Figure 1 – Green areas  
finishes acabamentos refletivos

Figure 2 – Reflective

## WATER EFFICIENCY

- Rainwater collection system for irrigation, maintenance and restrooms in administrative areas.
- Automated high-efficient irrigation system. 98% of the irrigation water is supplied by the reuse system. This is also a 30% reduction in the rainwater volume disposed in the public system. Considering a 2 year return period, for a 24 hour rain, this is equivalent to 43.000 liters diverted in the event.
- High efficient indoor plumbing fixture and fitting use that combined with the reuse water system results in a 20.5% reduction in potable water use.

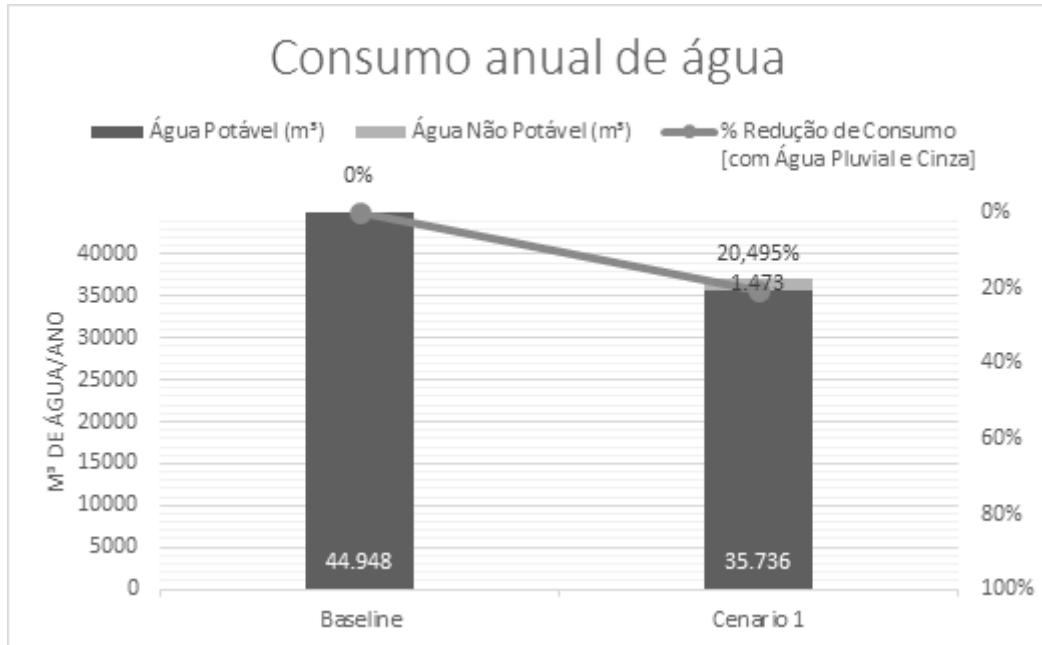


Figure 3 – Annual water consumption (plumbing fixture and fitting)

## ENERGY AND ATMOSPHERE

- Automatic external lighting turn off through photocells connected to the automation system.
- Water heating system consisted of 86 solar panels.
- Indirect expansion air conditioning system with chilled water, operating with 3 high efficiency chillers Carrier 30XW275.
- CO sensors in the garage exhaust system.
- Refrigerant gases that reduce stratospheric ozone depletion.
- Remote monitoring system for the energy consumption by end-use applications.
- Regenerative braking elevators.
- 12% energy consumption reduction, in cost, comparing to the American Standard ASHRAE 90.1-2007.

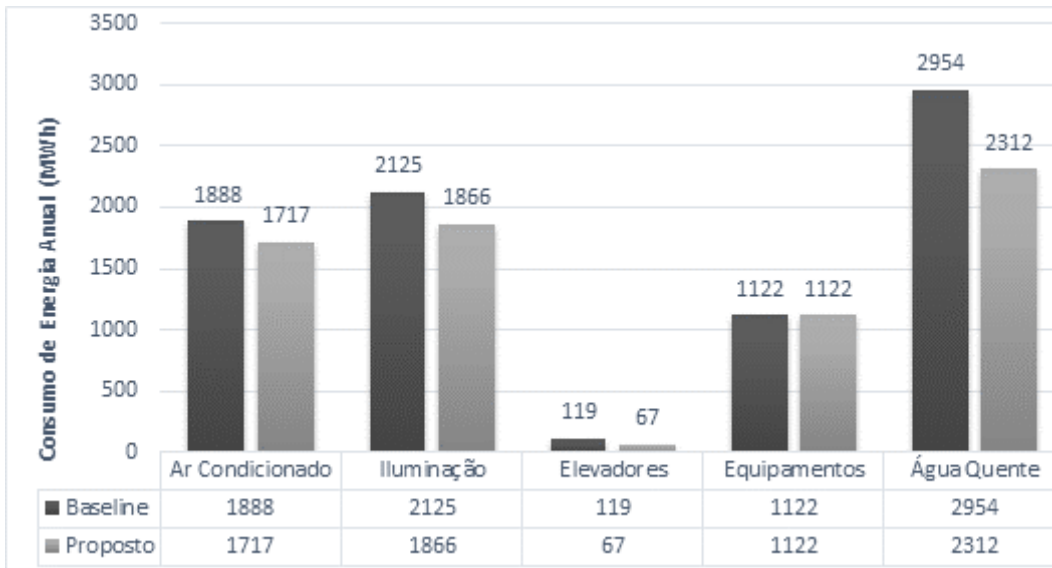


Figure 4 – Estimated consumption by end-use application:

Building results:

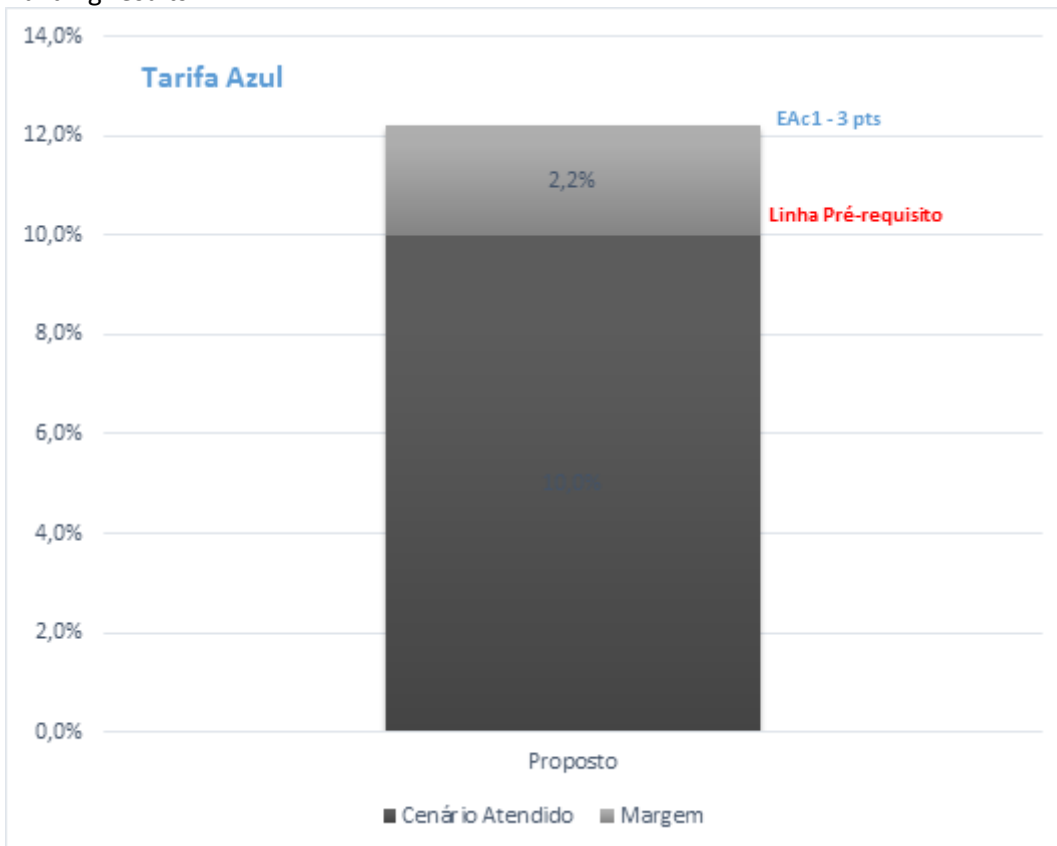


Figure 5 – Comparison of the building annual energy consumption with the ASHRAE 90.1-2007 Baseline.

## MATERIALS AND RESOURCES

- Vacuum waste collection system, connected to the Parque da Cidade complex, providing correct waste management.
- 75% of the construction site waste was diverted and recycled. (aguardar balanço de obra)
- 10% of the construction site materials have recycled content. (aguardar balanço de obra)
- 30% of the construction site materials were extracted and manufactured in an 800km radius of the building. (aguardar balanço de obra)

**INDOOR ENVIRONMENTAL QUALITY**

- Smoke prohibited in the building and in its entries, protecting any outdoor air supply intake for the air conditioning system, windows and doors.
- Use of paints and sealants that comply with the specified volatile organic compound (VOCs) limits, by the South Coast Air Quality Management District (SCAQMD) Standard Rule 1168, Rule 1113 and Green Seal-11, reducing the harmful emissions that cause odor, irritation and discomfort for the users.
- Approximately 90% of the internal occupied areas will have access to external views, ensuring visual comfort for the building occupants.