

# **Neo Next Generation**

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Address 1 - street: 88063-620 RUA OTáVIO CRUZ -

NOVO CAMPECHE, Brazil

Population: 72 hab

Starting year of the project : 2012 Delivery year of the project : 2017

Key words: NEO NEXT GENERATION, sustainable,

wind energy, solar energy, green building



0.53 ha



2 982 540 €

#### **ID CARD**

Among the positive advantages of the project, NEO is the first Brazilian residential project designed and executed with a system that uses combined sources of clean energy - wind and solar - ensuring 100% of the energy needed to heat the water of the apartments and social living areas of the two buildings. Another differential is the rational use of water, reused for irrigation of the gardens. We can also highlight an organic vegetable garden that adds to the composting space, to a system of waste disposal in individualized trash cans by floor and enabling selective collection. All aiming at the least impact possible to the environment without giving up comfort.

## **Programme**

- Housing
- Green spaces
- Others

# **Project progress**

· Operational phase

## Key points

- Quality of life
- Resources
- Biodiversity
- Energy /Climate

## Data reliability

Self-declared

#### Photo credit

Phillipe Arruda

#### **TERRITORY**

## Type of territory

The New Campeche, located on the East Coast in Florianópolis, is characterized by attracting an audience of successful people who seek the quality of life together with nature. The location is privileged on the Island of Santa Catarina. The region is surrounded by the lush nature of a permanent preservation area and close to the beach. The condominium has a strategic location, close to the beauties and the trendy nightlife of Lagoa da Conceição and a few minutes by car from the Center, the airport and the main access roads to the island of Santa Catarina. Because of this, the Novo Campeche neighborhood attracts people who have decided to move away from the big urban clusters in search of an effective quality of life next to the nature, without giving up comfort. Hence the choice of the place to house the Neo, which, as its name says, seeks to establish the "next generation" in residential developments.

#### Climate zone

[Cwa] Mild, dry winter, hot and wet summer.

#### **KEY FIGURES**

## Housing floor area

Housing floor area :  $3\ 336\ m^2$ 

### Number of residential units

Number of residential units: 24

# Total investment costs (before tax)

Total investment costs (before tax): 2 982 540 € HT

#### **GOVERNANCE**

## Project holder

Name: Setela Construtora Ltda

Type: Private company

#### General description:

The project was created from an inspiration, and from the will to evolve, to take the next step towards a more unified coexistence with the world. The buildings were built valuing the individuality of each resident, with total acoustic insulation. Also, solar panels and wind turbines were installed to capture clean energy, as well as water treatment systems are present to reuse water.

## Project management

Description:

# Project stakeholders

e-DAU

Function: Architecture agency

e-DAU is a cooperation between Designers, Architects and Urbanists, who work within a network. Its members are professionals and, in many cases, researchers and professors in these areas with a diversified academic and professional experience, both in Brazil, where the network was activated in 2006 (ex-Padovano arquitetura em Rede), and abroad.

Jaques Suchodolski

Construction21 company page:

Lippel Engenharia

Function: Technical consultancy agency Electrical and Ilumination projects (MEP)

Construction21 company page:

Serafim Engenharia

Function: Technical consultancy agency

Hydraulic and Plumbing project

Construction21 company page:

### Net density

45.28

#### **ECONOMIC DEVELOPMENT**

#### **RESOURCES**

## Water management

#### Reuse of rain water:

A system to colect rainwater was implemented in the roof of the buildings, the water colected by the sytem is stored in a underground tank, that water supplies the toilets and the irrigation of the green areas.

#### Water treatment system:

The building also have a water treatment system, that treats all the waste water produced by the buildings eliminating 98% of the waste present.

### Waste management

With the use of a composting station, waste management becomes more practical and agile. Also, the management and reuse of water is done inside the building, generating a minimal amount of waste.

The Buildings have in each floor recycling bins and its own composting station

#### **BIODIVERSITY**

### Biodiversity and natural areas

The project was carried out near permanent preservation areas, and has all the necessary care to maintain the ecosystem, without interfering directly. An organic garden is used to deal

with the organic waste generated in the building, in addition to an efficient waste collection system. Also all the carbon footprint of the construction period from the two buildings was neutralized with the planting of 320 native trees.

#### **ENERGY/CLIMATE**

### Climate adaptation, resources conservation, GHG emissions

We use solar and wind energy in our buildings, thus generating a clean energy consumption for the residents. The hot water of the 24 apartments and social living area is provided 100% through the use of energy generated by wind turbines and solar panels.

## **Energy mix**

The energy generated by wind turbines and solar panels is 100% driven to keep the buildings running, creating a sustainable environment for NEO NEXT GENERATION residents.

On the top of the residential towers there are two wind turbines, which work with winds from 3.5 meters per second, are 12.6 kilometers per hour. These Urban Green Energy vertical shaft turbines are made of carbon fiber and measure 3 meters wide by 6 meters high.

#### **SOLUTIONS**

**Eddy Wind Turbine** 

Description: Ideal for customers looking to lessen their impact on the environment or attain energy security, eddy epitomizes simplicity and convenience.

eddy can be assembled in less than an hour, mounted virtually anywhere, and



produces energy no matter which way the wind comes from. With a maximum safe wind speed of 55 m/s(120mph), and a 20-year lifetime, eddy is in it for the long haul. Manufactured by Urban Green Energy, a global leader in small wind, you can depend on eddy to produce clean energy day and night, year after year.

eddy will lower the amount of energy you purchase from the grid and provide energy security, ensuring that when the power is out you have electricity for the most important devices in your home. Already have a solar system or thinking of getting one? Let eddy join the party and you'll be producing energy day and night. eddy is, allowing him to be connected seamlessly with any solar system.

Be amazed at how affordable eddy is.

Performance
Rated Power 4000 W
Cut-inWind Speed 3.5 m/s (7 mph)
Rated RPM 120 RPM
Survival Wind Speed 55 m/s (123 mph)
Rated Wind Speed 12 m/s (26 mph)
Noise Level at 12 m/s 36 dB

Company:

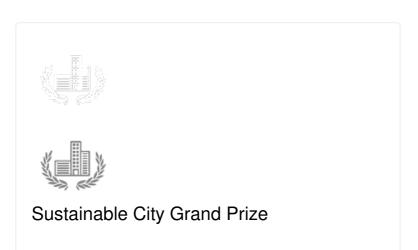
#### **BUILDINGS**

# **Buildings**

The frames of the apartments are of standard pvc Veka, of great thermo-acoustic insulation and the floors have double floor of concrete, isolating them of noises. The first Brazilian residential designed and run with a system that uses combined sources of clean energy - wind and solar.

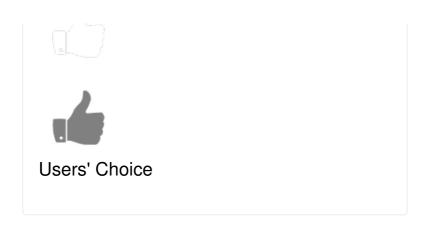
#### Contest

## **Building candidate in the category**









Date Export : 20230329012259