

# **Ecolife Capitol**

by EDGE Buildings / ○ 2019-06-13 16:31:41 / International / ⊚ 4171 / **P** EN



**Building Type**: Collective housing > 50m

Construction Year : 2015 Delivery year : 2018

Address 1 - street: 58 To Huu, Nam Tu Liem District 100000 HA NOI, Other countries

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

Net Floor Area: 53 476 m<sup>2</sup> Number of Dwelling: 630 Dwelling

### Certifications :



### Proposed by:



# General information

Ecolife Capitol's three high-rise residential towers introduced over 630 green apartments to the housing market in Ha Noi, Vietnam. To maximize energy savings and ensure occupant comfort, each of the apartments in the development are designed to maximize natural ventilation and feature low-flow plumbing fixtures, LED lighting and low-E double-glazed windows.

Ecolife Capitol was built by Capital House, a real estate investor dedicated to improving the resource efficiency of commercial and social housing through the use of energy-smart architectural design. Ecolife Capitol received final EDGE certification from SGS Vietnam.

# See more details about this project

Photo credit

# Stakeholders

#### Contractor

Name : Green Technology Trading and Construction Joint Stock Company

Contact : info[at]cnxconstruction.com

\* http://cnxconstruction.vn/home/

# Construction Manager

Name : Capital House

Contact : info[at]capitalhousepartners.com

Thttps://www.capitalhousepartners.com/about-us

#### Stakeholders

Function: Investor Thudo Invest

linhbtk[at]chgroup.vn

☑ http://thudologistics.com/

Project Owner

# Energy

# **Energy consumption**

Breakdown for energy consumption: 14 kWhfe/m2.year: hot water

9 kWhfe/m2.year : Lighting

4 kWhfe/m2.year : Common Amenities 8 kWhfe/m2.year: Home appliances

# Envelope performance

More information :

Roof U-value: 1.7 Wall U-value: 1.8 Glass U-value: 5.4

# Real final energy consumption

Final Energy: 34,69 kWhfe/m².year

# Renewables & systems

# **Systems**

#### Heating system:

No heating system

### Hot water system :

o Individual electric boiler

#### Cooling system:

No cooling system

#### Ventilation system :

Natural ventilation

#### Renewable systems:

Solar photovoltaic

Renewable energy production: 0,84 %

Capacity kWp/Unit: 0.02

### **Products**

#### **Product**

Reduced Window to Wall Ratio - WWR of 17%

Reflective Paint for External Walls - Solar Reflectivity (albedo) of 0.7

Insulation of Roof : U-value of 2.05
Insulation of External Walls : U-value of 1.71

Low-E Coated Glass: U-value of 1.8 W/m<sup>2</sup>.K and SHGC of 0.28

Energy-Saving Light Bulbs - Internal Spaces/Common Areas and External Spaces

Lighting Controls for Common Areas and Outdoors Solar Photovoltaics - 0.84% of Total Energy Demand

Product category: Table 'c21\_germany.innov\_category' doesn't exist SELECT one.innov\_category AS current,two.innov\_category AS parentFROM innov\_category AS oneINNER JOIN innov\_category AS two ON one.parent\_id = two.idWHERE one.state=1AND one.id = '14'

Low-Flow Showerheads - 7.72 L/min

Low-Flow Faucets for Kitchen Sinks - 8.05 L/min Low-Flow Faucets in All Bathrooms - 5.14 L/min Single Flush for Water Closets - 4.8 L/flush

Product category: Table 'c21\_germany.innov\_category' doesn't exist SELECT one.innov\_category AS current,two.innov\_category AS parentFROM

innov\_category AS oneINNER JOIN innov\_category AS two ON one.parent\_id = two.idWHERE one.state=1AND one.id = '9'

Internal Walls: Cellular Light Weight Concrete Blocks Flooring: Parquet/Wood Block Finishes/ Ceramic Tile

#### Costs

# Construction and exploitation costs

Additional information on costs:

# Energy bill

Forecasted energy bill/year : 11 640,00 €

Real energy cost/m2: 0.22 Real energy cost/Dwelling: 18.48

# Health and comfort

#### Water management

Consumption from water network: 5 505,60 m<sup>3</sup>

Water Consumption/m2: 0.1
Water Consumption/Dwelling: 8.74

45 kL/unit/year : shower
32 kL/unit/year : kitchen
17 kL/unit/year : water faucets
20 kL/unit/year : water closets
23 kL/unit/year : washing and cleaning

### Comfort

Health & comfort: A green project is a project that can not be green or green, but must be green, to create an ecological environment with fresh air, thereby creating comfort, do Increase happiness index for residents and longevity of people.

With the design of this green - sustainable - environmental friendly motto, EcoLife Capitol was built from nature-friendly materials in harmony with the landscape which do not pollute the environment and save maximum power sources. At EcoLife Capitol, work surfaces allow sunlight through subtly arranged spaces. Spaces and the architecture ratio are researched in terms of sun and wind direction to reduce the impact of climate and strong light. Rooftop greeneries provide oxygen and contribute to a comfortable living space.

The residents of the EcoLife Capitol have seen the real value of the project in enhancing health indicators, good ecological environment, and significant energy savings

#### Carbon

#### **GHG** emissions

GHG in use: 15,00 KgCO<sub>2</sub>/m<sup>2</sup>/year

CO2 Emissions g/kWh of Electricity: 428.6 g/kWh

#### Contest

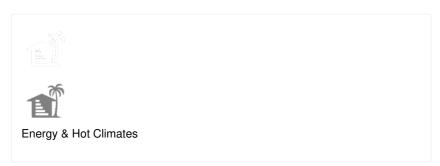
# Reasons for participating in the competition(s)

Energy (30% energy savings): Reduced window to wall ratio, reflective paint for external walls, insulation of roof and external walls, low-E coated glass, energy-saving lighting for external and internal spaces, lighting controls for common areas and outdoor spaces and solar photovoltaics.

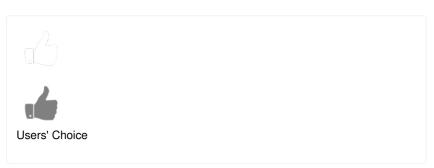
Water (27% water savings): Low-flow plumbing fixtures for washbasins and kitchens and single flush water closets.

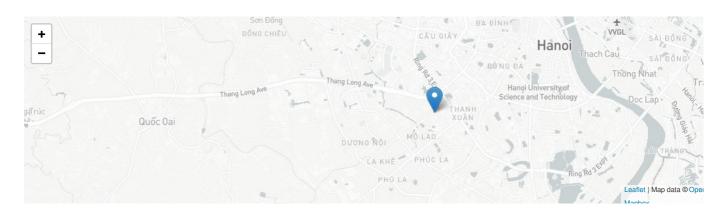
Materials (42% less embodied energy in materials): Cellular light weight concrete blocks for internal walls and parquet/wood block finishes for flooring.

# **Building candidate in the category**









Date Export : 20230527193323

марих