


Ecolife Capitol

by EDGE Buildings / 2019-06-13 16:31:41 / Internacional / 4007 / EN



Primary energy need :
kWhpe/m².year
(Calculation method :)

ENERGY CONSUMPTION

Consumption Range (kWhpe/m ² .year)	Grade	Category
< 50	A	Economical building
51 à 90	B	
91 à 150	C	
151 à 230	D	
231 à 330	E	
331 à 450	F	
> 450	G	Energy-intensive building

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 m² Superficie útil

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](#)

<https://www.edgebuildings.com/projects/ecolife-capitol/>

Photo credit

Photos Courtesy of Capital House

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

<https://www.capitalhousepartners.com/about-us>

Stakeholders

Function : Investor

Thudo Invest

linhbt[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 :

- 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/m².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_spain.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_spain.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 m³

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 KgCO₂/m²/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.

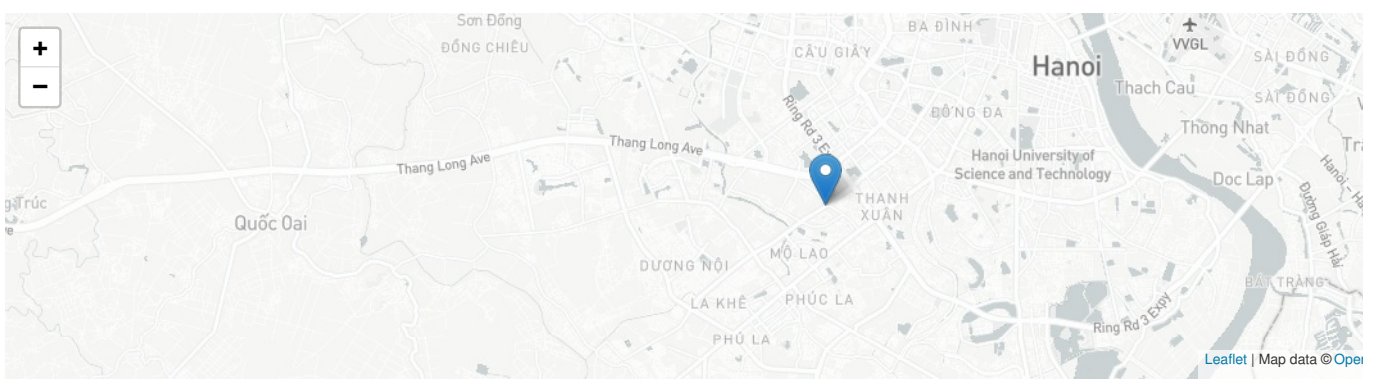
Building candidate in the category



Energy & Hot Climates



Users' Choice



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