

Project Name: Piloto CENIT
 Subproject Name: Piloto CENIT

Project Details

Project Name Piloto CENIT	Address Line1 Planta Ecopetrol Cisneros - Vereda El paraiso
Number of Distinct Buildings 1	Address Line2 Km 5.2 Cisneros - Pto Berrio
Number of EDGE Subproject(s) associated 1	City Cisneros
Total Project Floor Area (m ²) 156.48	State/ Province Antioquia
Project Owner Name Cenit Transporte y Logística de Hidrocarburos S.A.S	Postal Code 053050
Project Owner Email teoremagerencia@gmail.com	Country Colombia
Project Owner Phone Mobile 57 - 3193253828	Project Number 1001010269
Share project name and basic information to potential investors or banks? Yes	Do you intend to certify? Yes
Is this Project created for Training Purpose? No	

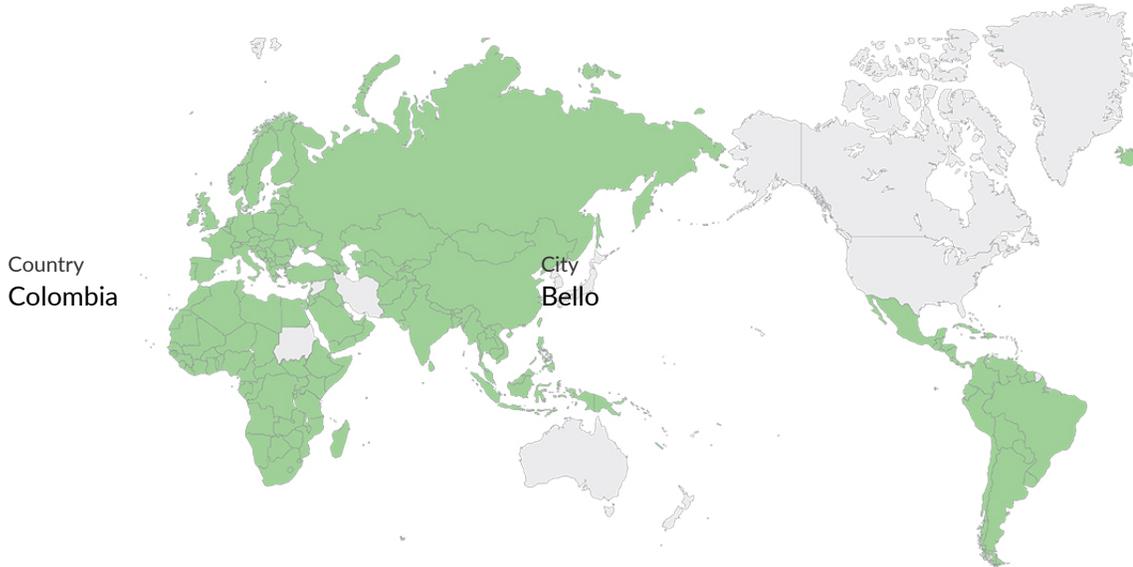
Associated Subproject(s)
 Total associated subprojects: 1
 The complete list of Associated Subprojects is available in the last section of this document.

Subproject Details

Subproject Name Piloto CENIT	Address Line1 Planta Ecopetrol Cisneros - Vereda El paraiso
Building Name Piloto CENIT-MPS	Address Line2 Km 5.2 Cisneros - Pto berrio
Subproject Multiplier for the Project 1	City Cisneros
Certification Stage Post-Construction	State/ Province Antioquia
Status Certified	Postal Code 053050
Auditor Daniel Bernal	Country Colombia
Certifier CAMACOL	Subproject Type New Building
File Number 22052310136723	

Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Location



Building Type

Primary Building Type
Serviced Apartment

Subtype
Serviced Apartment

Project Name: Piloto CENIT
 Subproject Name: Piloto CENIT

Building Data

<i>Default</i>		<i>User Entry</i>	Operational Details	
<i>Default</i>		<i>User Entry</i>	<i>Default</i>	<i>User Entry</i>
Gross Internal Area (m ²)	20,730	156.5	Working Days (Days/Week)	7
No. of Floors Above Grade	5	1	No. of Holidays (Days/Year)	-
No. of Floors Below Grade	2	0	Hours of Operation (Hrs/Day)	8
Floor-to-Floor Height (m)	3.0	2.54	Occupancy Density (m ² /Person)	19.5
Aggregate Roof Area (m ²)	156	156.48	Average Occupancy Rate (%)	50
			Building Costs	
			Cost of Construction (COP/m ²)	2,938,879
			Estimated Sale Value (COP/m ²)	6,153,851

Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Area and Loads Breakdown

Gross Internal Area (m²)
156.5

Default (m ²)	User Entry (m ²)	Default	User Entry
Apartment Area 232.0	101.08	Area with Exterior Lighting (m ²) 6,219	40.73
Lobby 0.4	0	External Carparking Area (m ²) 1,000	0
Corridors 0.1	23.6	Covered Carparking Area (m ²) 19,000	0
Recreational Area 4.7	31.8	Water End Uses	
Back of House 2.2	0	Irrigated Area (m ²) 2,073	0
Indoor Car Parking 133.6	0	Swimming Pool Type (m ²) Indoor Heated Pool and Outdoor Unheated Pool	None
Studio 50	0	Swimming Pool (m ²) 20	0
1-Bedroom 40	4	Car Washing No	No
2-Bedroom 60	0	Washing Clothes No	No
3-Bedroom 30	0	Process Water No	No
4-Bedroom 20	0	Dishwasher Yes	Yes
Total No. of Rooms 4.00		Pre Rinse Spray Valve Yes	Yes

Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Kitchen & Food Preparation

Kitchen		Pantry		Coffeehouse/Café	
Description	Default	User Selection	Unit		
No. of Meals /day	2.00		Meals/Person/day		
Total People having on site meal	50%		%		
Food Prepared on Site	80%		%		
People using pantry	10%		%		
People using coffeehouse	40%		%		
Energy per meal	2.61		kWh/meal		

Building Dimensions

Default Building Length (m)	User Entry (m)	Façade Area Exposed to Outside Air (%)
North 6.4	21.46	100
North East 6.4	0	100
East 6.4	7.26	100
South East 6.4	0	100
South 6.4	21.46	100
South West 6.4	0	100
West 6.4	7.26	100
North West 6.4	0	100

Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Building HVAC System

Select Input Type

Simplified Inputs

Does the Building Design Include an AC system?

No

Does the Building Design Include a Space Heating System?

No

Does the Building Design Include Purchased Chilled Water and Heating Supply (District Cooling or Heating)?

None

Applicable Baseline

EDGE

Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Fuel Usage

		Cost Input	
Default	User Entry	Default	User Entry
Hot Water Electricity	Electricity	Electricity (COP/kWh) 203.46	
Space Heating Electricity	Electricity	Diesel (COP/Lt) 1,932.87	
Generator Diesel	Diesel	Natural Gas (COP/kg) 2,520.82	
% of Electricity Generation Using Diesel 5.00%		LPG (COP/kg) 2,520.82	
Fuel Used for Cooking Electricity	None	Coal (COP/kg) 274.7	
CO ₂ Emissions Factor		Fuel Oil (COP/Lt) 1,035.0	
Default Electricity (kg of CO ₂ /kWh) 0.21	User Entry	Water (COP/KL) 1,865.05	
Diesel (kg of CO ₂ /kWh) 0.25		Conversion from USD (COP/USD) 3,391.00	
Natural Gas (kg of CO ₂ /kWh) 0.18			
LPG (kg of CO ₂ /kWh) 0.24			
Coal (kg of CO ₂ /kWh) 0.32			
Fuel Oil (kg of CO ₂ /kWh) 0.25			

Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Climate Data

Default	User Entry	Default	User Entry
Elevation (m) 1,495	1,050	Latitude (degrees) 6	6.53682
Rainfall (mm/year) 1,669	3,015	ASHRAE Climate Zone 4A	4A

Temperature (°C)

Default (Monthly Max.)	User Entry (Monthly Max.)	Default (Monthly Max.)	User Entry (Monthly Max.)
Jan 26.1	Jan	Jul 26.4	Jul
Feb 25.4	Feb	Aug 26.3	Aug
Mar 25.6	Mar	Sep 25.6	Sep
Apr 24.4	Apr	Oct 26.5	Oct
25.3		Nov 25.7	Nov
Jun 25.3	Jun	Dec 25.2	Dec
Default (Monthly Min.)	User Entry (Monthly Min.)	Default (Monthly Min.)	User Entry (Monthly Min.)
Jan 11.4	Jan	Jul 11.0	Jul
Feb 11.7	Feb	Aug 11.5	Aug
Mar 11.5	Mar	Sep 11.4	Sep
Apr 11.9	Apr	Oct 11.0	Oct
11.3		Nov 11.4	Nov
Jun 11.3	Jun	Dec 12.0	Dec

Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Climate Data

Relative Humidity (%)

Default (Monthly Avg.)	User Entry (Monthly Avg.)	Default (Monthly Avg.)	User Entry (Monthly Avg.)
Jan 69.7%	Jan	Jul 69.8%	Jul
Feb 71.5%	Feb	Aug 68.3%	Aug
Mar 71.9%	Mar	Sep 71.2%	Sep
Apr 73.1%	Apr	Oct 69.2%	Oct
72.6%		Nov 72.5%	Nov
Jun 70.4%	Jun	Dec 71.9%	Dec

Wind Speed (m/sec)

Default (Monthly Avg.)	User Entry (Monthly Avg.)	Default (Monthly Avg.)	User Entry (Monthly Avg.)
Jan 0.3	Jan	Jul 0.8	Jul
Feb 0.2	Feb	Aug 0.9	Aug
Mar 0.1	Mar	Sep 0.6	Sep
Apr 0.1	Apr	Oct 0.1	Oct
0.3		Nov 0.1	Nov
Jun 0.6	Jun	Dec 0.2	Dec

Results

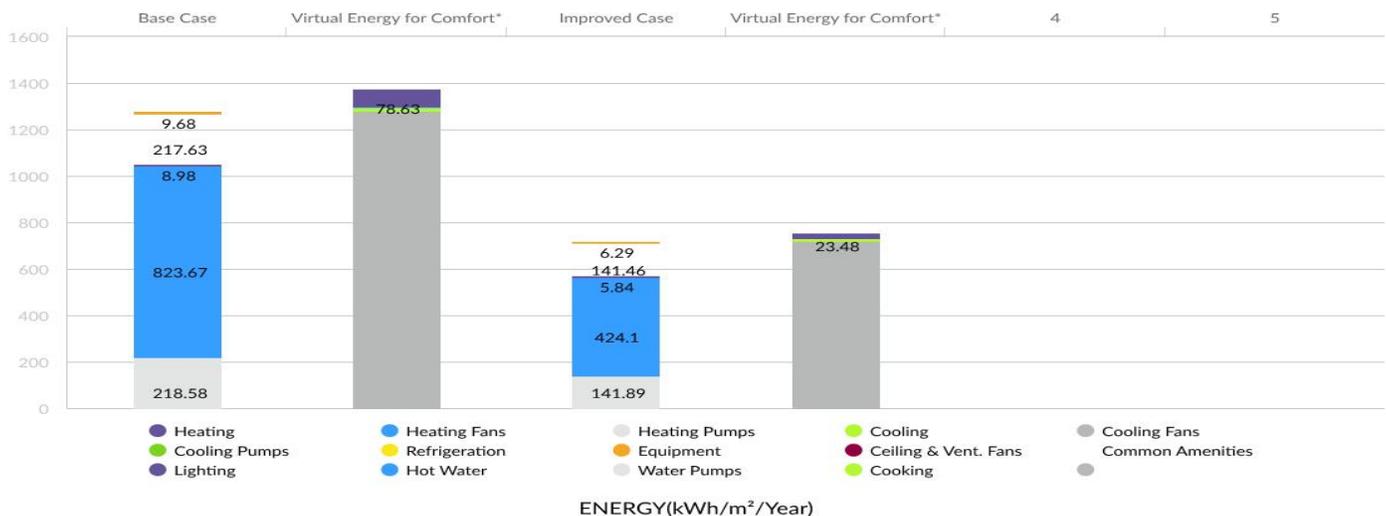
Final Energy Use (kWh/Month) 9,385	Improved Case EPI (kWh/m ² /year) 720.0
Final Water Use (m ³ /Month) 273	Total Building Construction Cost (Million COP) 459.9
Final Operational CO ₂ Emissions (tCO ₂ /Month) 1.97	Incremental Cost (Million COP) 195.28
Final Embodied Carbon (Kg CO ₂ e/m ²) 101	% Increase in cost 42.46%
Final Utility Cost (COP/Month) 1,899,107	Payback in Years (Yrs.) 6.4
Subproject Floor Area (m ²) 156.48	Number of People Impacted (No./Year) 43,812
Energy Savings (MWh/Year) 87.48	Base Case - Refrigerant Global Warming Potential (tCO ₂ e/Year) 0.1
Water Savings (m ³ /Year) 2,186.06	Improved Case - Refrigerant Global Warming Potential (tCO ₂ e/Year) 0.1
Operational CO ₂ Savings (tCO ₂ /Year) 18.40	
Embodied Carbon Savings (tCO ₂ e) 41.25	
Utility Cost Savings in USD (USD/Year) 9,017.25	
Utility Cost Savings in Local Currency (Million COP/Year) 30.578	
Base Case EPI (kWh/m ² /year) 1,279.0	

ENERGY SAVINGS

EDGE ADVANCED

Energy Efficiency Measures 45.18%

Meets EDGE Energy Standard



Project Name: Piloto CENIT
 Subproject Name: Piloto CENIT

Net Carbon Emissions: 24.9 tCO₂e/Year

Energy Efficiency Measures 45.18%

- ✓ EEM01* Window-to-Wall Ratio: 14.37%
 Base Case Value: 30%
WWR (%): 14.37
- EEM02 Reflective Roof: Solar Reflectance Index 85
- EEM03 Reflective Exterior Walls: Solar Reflectance Index 85
- EEM04 External Shading Devices: Annual Average Shading Factor (AASF) 0.16
- ✓ EEM05* Insulation of Roof: U-value 0.35 W/m²·K
 Base Case Value: 1.91 W/m²·K
U-Value (W/m²·K): 0.35
- ✓ EEM06* Insulation of Ground/Raised Floor Slab: U-Value 0.29 W/m²·K
 Base Case Value: 0.49 W/m²·K
U-Value (W/m²·K): 0.29
 Edge Insulation Type: Vertical
- EEM07 Green Roof
- ✓ EEM08* Insulation of Exterior Walls: U-Value 0.3 W/m²·K
 Base Case Value: 1.86 W/m²·K
U-Value (W/m²·K): 0.36
- ✓ EEM09* Efficiency of Glass: U-Value 5.79 W/m²·K, SHGC 0.81 and VT 0.89
 Base Case Value: 5.7 W/m²·K & SHGC 0.8 & VT 0.7
U-Value (W/m²·K): 5.79 **VT (Factor): 0.89**
SHGC: 0.81
- EEM10 Air Infiltration of Envelope: 50% Reduction
- EEM11 Natural Ventilation
- EEM12 Ceiling Fans

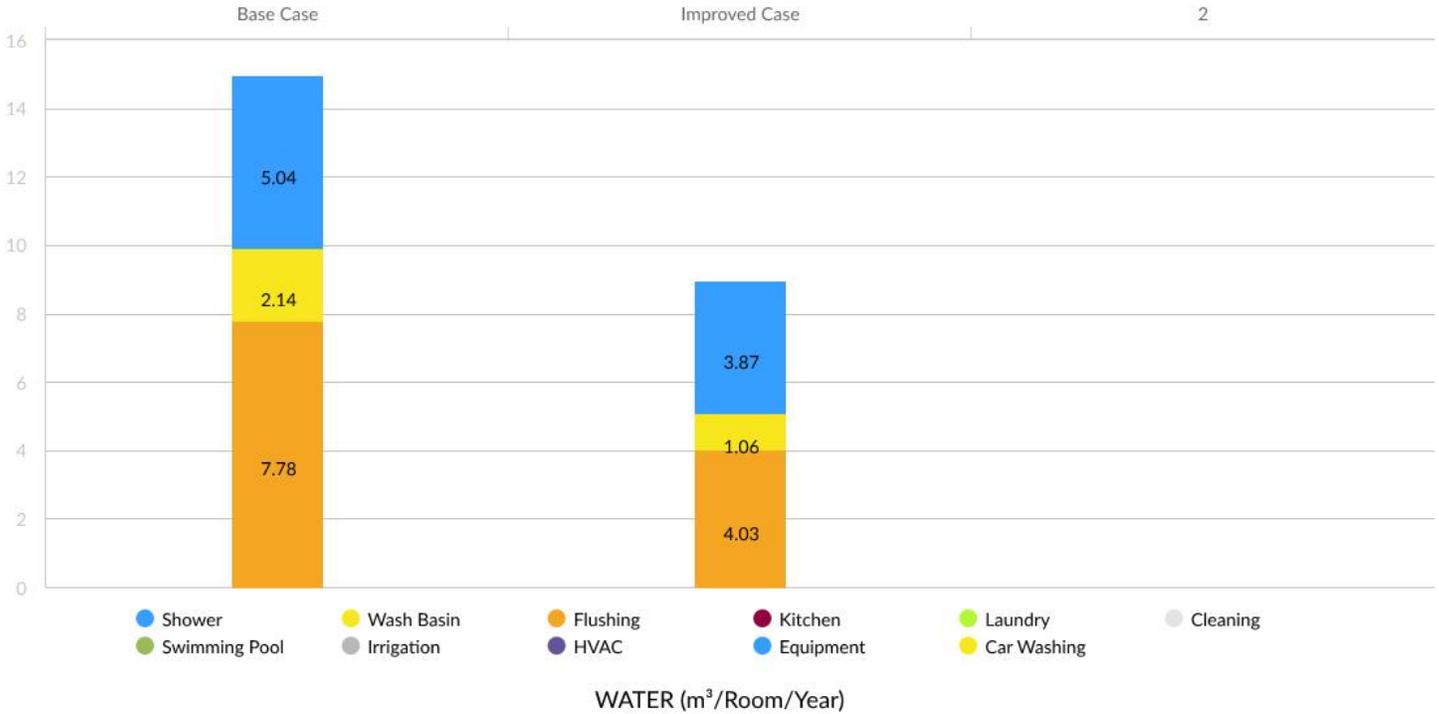
Energy Efficiency Measures 45.18%

EEM15 Fresh Air Pre-conditioning System: Efficiency 65%	EEM25 Skylights																																												
<p>✓ EEM18 Domestic Hot Water (DHW) System : Solar 0%, Heat Pump 0%, Boiler 100%</p> <p>Base Case Solar HW Usage : 0%</p> <p>Base Case Hot Water Heater Usage: 0%</p> <p>Base Case Hot Water Heater Efficiency: 100%</p> <table border="0"> <thead> <tr> <th></th> <th>Default Hot Water Usage (%)</th> <th>User Entry Hot Water Usage (%)</th> <th>Default</th> <th>User Entry</th> <th></th> </tr> </thead> <tbody> <tr> <td>Solar</td> <td>50%</td> <td>0</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Heat Pump</td> <td>50%</td> <td>0</td> <td>3.00</td> <td></td> <td>COP</td> </tr> <tr> <td>Boiler</td> <td>0%</td> <td>100</td> <td>100%</td> <td>99.9</td> <td>% Efficiency</td> </tr> </tbody> </table> <p>EEM19 Domestic Hot Water Preheating System</p>		Default Hot Water Usage (%)	User Entry Hot Water Usage (%)	Default	User Entry		Solar	50%	0				Heat Pump	50%	0	3.00		COP	Boiler	0%	100	100%	99.9	% Efficiency	<p>EEM26 Demand Control Ventilation for Parking Using CO Sensors</p> <p>EEM29 Efficient Refrigerators and Clothes Washing Machines</p> <p>EEM30 Submeters for Heating and/or Cooling Systems</p> <p>EEM31 Smart Meters for Energy</p> <p>EEM32 Power Factor Corrections</p> <p>✓ EEM33 Onsite Renewable Energy: 35% of Annual Energy Use</p> <p>Base Case: No Onsite Renewable Energy</p> <table border="0"> <thead> <tr> <th>Renewable Energy System Type</th> <th>Default Annual Energy Use (%)</th> <th>User Entry Annual Electricity Use (%)</th> <th>Annual Energy Use (kWh/Year)</th> </tr> </thead> <tbody> <tr> <td>Solar Photovoltaic</td> <td>25%</td> <td>35</td> <td>60,638</td> </tr> <tr> <td>Wind Turbine</td> <td>0%</td> <td>0</td> <td>-</td> </tr> <tr> <td>Biomass</td> <td>0%</td> <td>0</td> <td>-</td> </tr> <tr> <td>Other</td> <td>0%</td> <td>0</td> <td>-</td> </tr> </tbody> </table> <p>EEM34 Other Energy Saving Measures</p> <p>EEM35 Offsite Renewable Energy Procurement: 100% of Annual Operational CO₂</p> <p>EEM36 Carbon Offsets: 100% Annual Operational CO₂</p> <p>EEM37 Low-Impact Refrigerants</p>	Renewable Energy System Type	Default Annual Energy Use (%)	User Entry Annual Electricity Use (%)	Annual Energy Use (kWh/Year)	Solar Photovoltaic	25%	35	60,638	Wind Turbine	0%	0	-	Biomass	0%	0	-	Other	0%	0	-
	Default Hot Water Usage (%)	User Entry Hot Water Usage (%)	Default	User Entry																																									
Solar	50%	0																																											
Heat Pump	50%	0	3.00		COP																																								
Boiler	0%	100	100%	99.9	% Efficiency																																								
Renewable Energy System Type	Default Annual Energy Use (%)	User Entry Annual Electricity Use (%)	Annual Energy Use (kWh/Year)																																										
Solar Photovoltaic	25%	35	60,638																																										
Wind Turbine	0%	0	-																																										
Biomass	0%	0	-																																										
Other	0%	0	-																																										
EEM22 Efficient Lighting for Internal Areas																																													
EEM23 Efficient Lighting for External Areas																																													
EEM24 Lighting Controls																																													

WATER SAVINGS

Water Efficiency Measures 40.06%

Meets EDGE Water Standard



Water Efficiency Measures 40.06%

- ✓ WEM01* Water-efficient Showerheads: 6.14 L/min
 Base Case Value: 8 L/min
 Bath Type: Showerheads Flow Rate (L/min): 6.14 Hot Water Provision: Yes
- ✓ WEM02* Water-efficient Faucets for all Bathrooms: 3.85 L/min
 Base Case Value: 8.3 L/min
 Faucet Type: Faucets with Aerators Flow Rate (L/min): 3.85 Hot Water Provision: Yes
- ✓ WEM04* Efficient Water Closets for All Bathrooms: 3.8 L/flush
 Base Case Value: Single Flush, 9 L/flush
 Type Of Water Closet: Single Flush High Volume Flush (L/min): 3.8
- WEM06 Water-efficient Bidet: 2 L/min
- ✓ WEM08* Water-efficient Faucets for Kitchen Sinks: 8.3 L/min
 Base Case Value: 8.3 L/min
 Hot Water Provision: Yes Flow Rate (L/min): 8.3

Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Water Efficiency Measures 40.06%

WEM09 Water-efficient Dishwashers: 4 L/Rack

WEM10 Water-efficient Pre-rinse Spray Valves for Kitchen: 4 L/min

WEM12 Swimming Pool Covers: 30% Area Covered

WEM13 Water-efficient Landscape Irrigation System: 4 L/m²/day

WEM14 Rainwater Harvesting System: 79 m² of Catchment Area

WEM15 Waste Water Treatment and Recycling System: 40% Treated

WEM16 Condensate Water Recovery: 100% Recovery

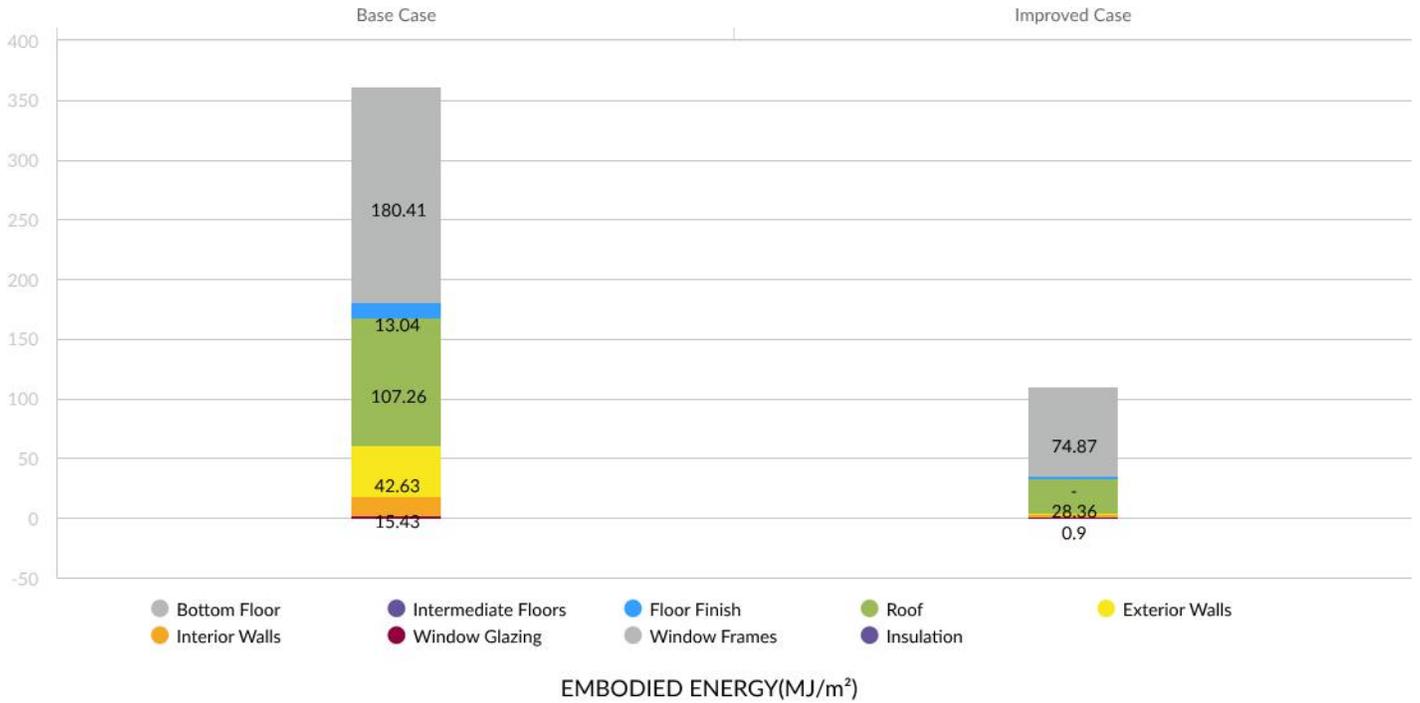
WEM17 Smart Meters for Water

Project Name: Piloto CENIT
 Subproject Name: Piloto CENIT

EMBODIED CARBON SAVINGS

Materials Efficiency Measures 73.00%

Meets EDGE Material Standard



Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Materials Efficiency Measures 73.00%

Improved Case Selection	Building Material	Proportion %	Thickness (mm)	U-Value (W/m ² ·K)	Embodied Carbon(kg/m ²)
MEM01* Bottom Floor Construction Base Case Material: Concrete Slab In-situ Reinforced Conventional Slab Thickness : 100mm & Steel : 35kg/m ²	Type 1 Steel Floor Light-gauge Steel Floor Cassette	100 %	131.2	0.29	
MEM02* Intermediate Floor Construction Base Case Material: Concrete Slab In-situ Reinforced Conventional Slab Thickness : 300mm & Steel : 35kg/m ²	Type 1 Default Base Case Material	100 %			
MEM03* Floor Finish Base Case Material : Tiled Ceramic Tiles Thickness : 10mm	Type 1 Wood Laminated Wood	64 %	7		
	Type 2 Tiled Ceramic Tiles	36 %	8		
MEM04* Roof Construction Base Case Material: Concrete Slab In-situ Trough Slab Thickness : 300mm & Steel : 35kg/m ²	Type 1 Metal Roof Steel Sheets on Steel Rafters	100 %	116	0.00	
MEM05* Exterior Walls Base Case Material: Brick Wall Solid brick (0-25% voids) with external and internal plaster Thickness : 230mm	Type 1 Metal Stud Wall with Cement Fiber Boards	100 %	100	0.00	
MEM06* Interior Walls Base Case Material : Brick Wall Solid brick (0-25% voids) with external and internal plaster	Type 1 Cement Fibre Boards on Metal Studs	100 %	100		

Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Materials Efficiency Measures 73.00%

Improved Case Selection	Building Material	Proportion %	Thickness (mm)	U-Value (W/m ² .K)	Embodied Carbon (kg/m ²)
MEM07* Window Frames Base Case Material : Aluminium	Type 1 Aluminium	100 %			
MEM08* Window Glazing Base Case Material: Single Glazing Thickness : 8mm	Type 1 Single Glazing Type 2 Single Glazing	71.84 % 28.1599 999999 99997 %	6.4 3.7	1.46	
MEM09* Roof Insulation Base Case Material: X - No insulation Thickness : 0mm	Type 1 Cellulose Insulation	100 %	62		
MEM10* Wall Insulation Base Case Material : X - No insulation Thickness : 0mm	Type 1 Cellulose Insulation	100 %	62		
MEM11* Floor Insulation Base Case Material: Polystyrene Foam Spray or Board Insulation Thickness : 54.9mm	Type 1 Cellulose Insulation	100 %	62		

EDGE Certification Checklist

Building Type	Certification Stage	Subproject Name
Serviced Apartment	Post-Construction	Piloto CENIT
Water Measures		Construction Audit Requirements
WEM01	Low Flow Showerheads	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ On site test results using actual water pressure on site, which will supersede the standard design flow rate values; with average flow rate sampled from multiple locations, floors, or units, as applicable, measured at the highest flow per minute, using a timer and a measurement container; and ✓ Date-stamped photographs of the showerhead(s) taken during or after installation showing the make and model; or ✓ Purchase receipts for the showerheads showing the make and model. ✓ Existing building projects&nbsp; If some of the documents required above are not available, other evidence of construction details, such as existing building drawings or photographs can be submitted. ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ On site test results using actual water pressure on site, which will supersede the standard design flow rate values; with average flow rate sampled from multiple locations, floors, or units, as applicable, measured at the highest flow per minute, using a timer and a measurement container; and ✓ Date-stamped photographs of the showerhead(s) taken during or after installation showing the make and model; or ✓ Purchase receipts for the showerheads showing the make and model. ✓ Existing building projects&nbsp; If some of the documents required above are not available, other evidence of construction details, such as existing building drawings or photographs can be submitted.
WEM02	Low-Flow Faucets for Private Bathrooms	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ On site test results using actual water pressure on site, which will supersede the standard design flow rate values; with average flow rate sampled from multiple locations, floors, or units, as applicable, measured at the highest flow per minute, using a timer and a measurement container; and ✓ Date-stamped photographs of the faucet(s) taken during or after installation showing the make and model; or ✓ Purchase receipts for the faucet(s) showing the make and model. ✓ Existing building projects&nbsp; If some of the documents required above are not available, other evidence of construction details, such as existing building drawings or photographs can be submitted.

WEM08	Low-Flow Faucets for Kitchen Sink	<ul style="list-style-type: none"> ✓ Date-stamped photographs of the faucet(s) or flow restrictor(s) taken during or after installation showing the make and model; or ✓ Purchase receipts for the faucet(s) or flow restrictor(s) showing the make and model. ✓ Existing building projects&nbsp; If some of the documents required above are not available, other evidence of construction details, such as existing building drawings or photographs can be submitted.
Energy Measures		Construction Audit Requirements
EEM01	Window to Wall Ratio	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ As-built façade drawings; or ✓ External and internal photographs of the building showing all the elevations Date-stamped photographs of the building interior and exterior showing all the elevations. ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.
EEM05	Insulation of Roof	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ Date-stamped photographs of the roof(s) taken during construction at a point when any insulation materials claimed were visible on site; or ✓ Purchase receipts showing the installed products. ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photographs can be submitted.
EEM06	Insulation of Ground/Exposed Slab	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ Date-stamped photographs of the floor(s) taken during construction at a point when any insulation materials claimed were visible on site; or ✓ Purchase receipts showing the installed products. ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photographs can be submitted.
EEM08	Insulation of External Wall	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ Date-stamped photographs of the exterior wall(s) taken during construction at a point when any insulation materials claimed were visible on site; or ✓ Purchase receipts showing the installed products. ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photographs can be submitted.
EEM09	Efficient Glass	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and

EEM09	Efficient Glass	<ul style="list-style-type: none"> ✓ Date-stamped photographs of the glazing units installed; or ✓ Purchase receipts showing the brand and product installed. ✓ Existing building projects If the documents required above are not available, other evidence of construction details, such as existing building drawings or photographs can be submitted.
EEM18	Hot Water Generation System	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the documents to clearly reflect As-Built conditions; and ✓ Date-stamped photographs of the water heating equipment taken during or after installation showing the make and model; or ✓ Purchase receipts for the water heating equipment showing the make and model; or ✓ Contract with the management company showing the efficiency of the water heating system, if the system is under separate management or off-site.
EEM33	Onsite Renewable Energy System	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ Photographs of the installed system; or ✓ Purchase receipts and delivery notes of the system; or ✓ Contract with the energy management company if the system is owned by a third party. ✓ Existing building projects If some of the documents required above are not available, other evidence of construction details, such as existing building drawings or photographs can be submitted.

Material Measures		Construction Audit Requirements
MEM01	Bottom Floor Construction	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ Date-stamped photographs of the floor slabs taken during construction showing the claimed products on site; or ✓ Purchase receipts showing the installed products. ✓ If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.
MEM03	Floor Finish	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ Date-stamped photographs of the flooring during or after installation showing the claimed products on site; or ✓ Purchase receipts showing the installed products. ✓ Existing building projects If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.
MEM04	Roof Construction	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and

MEM04	Roof Construction	<ul style="list-style-type: none"> ✓ Date-stamped photographs of the roof(s) taken during construction showing the claimed products on site; or ✓ Purchase receipts showing the installed products. ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.
MEM05	Exterior Walls	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ Date-stamped photographs of the floor slabs taken during construction showing the claimed products on site; or ✓ Purchase receipts showing the installed products. ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.
MEM06	Interior Walls	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ Date-stamped photographs of the floor slabs taken during construction showing the claimed products on site; or ✓ Purchase receipts showing the installed products. ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.
MEM07	Window Frames	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ Manufacturer's data sheets showing the make and model, material and U-value of the installed window frames; and ✓ Date-stamped photographs of the window frames during or after installation showing the make and model; or ✓ Purchase receipts showing the make and model of the installed window frames. ✓ This measure includes exterior glass doors. ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.
MEM08	Window Glazing	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and ✓ Manufacturer's data sheets showing the make and model, U-value and SHGC of the installed glass; and ✓ Date-stamped photographs of the glazing during or after installation showing the make and model; or ✓ Purchase receipts showing the make and model of the installed windows/glass.

MEM08	Window Glazing	<ul style="list-style-type: none"> ✓ ? This measure includes exterior glass doors. <hr/> <ul style="list-style-type: none"> ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.
MEM09	Roof Insulation	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and <hr/> <ul style="list-style-type: none"> ✓ Manufacturer's data sheets showing the brand and product name and insulating properties of the installed insulation; and <hr/> <ul style="list-style-type: none"> ✓ Date-stamped photographs of the insulation during construction showing the product; or <hr/> <ul style="list-style-type: none"> ✓ Purchase receipts showing the brand and product installed. <hr/> <ul style="list-style-type: none"> ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.
MEM10	Wall Insulation	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and <hr/> <ul style="list-style-type: none"> ✓ Manufacturer's data sheets showing the brand and product name and insulating properties of the installed insulation; and <hr/> <ul style="list-style-type: none"> ✓ Date-stamped photographs of the insulation during construction showing the product; or <hr/> <ul style="list-style-type: none"> ✓ Purchase receipts showing the brand and product installed. <hr/> <ul style="list-style-type: none"> ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.
MEM11	Floor Insulation	<ul style="list-style-type: none"> ✓ Documents from the design stage if not already submitted. Include any updates made to the design stage documents to clearly reflect as-built conditions; and <hr/> <ul style="list-style-type: none"> ✓ Manufacturer's data sheets showing the brand and product name and insulating properties of the installed insulation; and <hr/> <ul style="list-style-type: none"> ✓ Date-stamped photographs of the insulation during construction showing the product; or <hr/> <ul style="list-style-type: none"> ✓ Purchase receipts showing the brand and product installed. <hr/> <ul style="list-style-type: none"> ✓ Existing building projects&nbsp; If the documents required above are not available, other evidence of construction details, such as existing building drawings or photos taken during renovation can be submitted.

Project Name: Piloto CENIT
Subproject Name: Piloto CENIT

Associated Subproject(s)

Sr No.	Associated Subproject Name	Country	City
1	Piloto CENIT	Colombia	Bello