



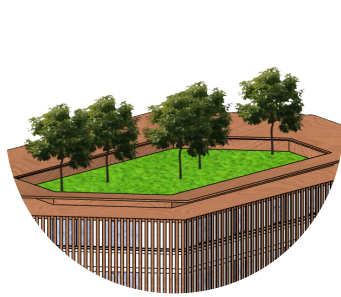
INOVASI HEMAT ENERGI

VERTIKAL GARDEN



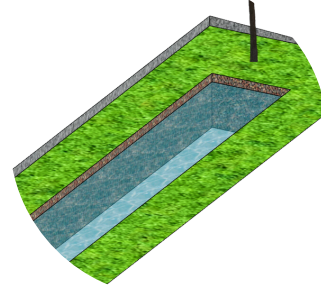
Vertikal garden pada bagian bangunan yang dekat dengan jalan

GREEN ROOF



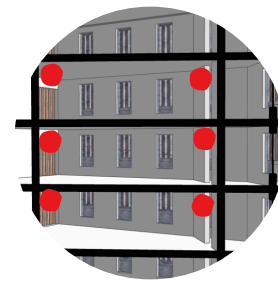
Green Roof yang digunakan sebagai green garden

KOLAM RETENSI



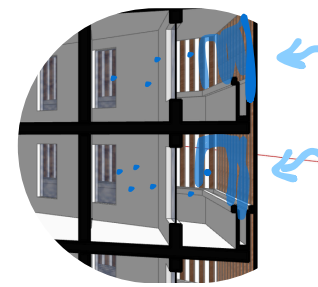
Pengahwaan evaporasi dari kolam retensi pada bagian depan bangunan

SENSOR



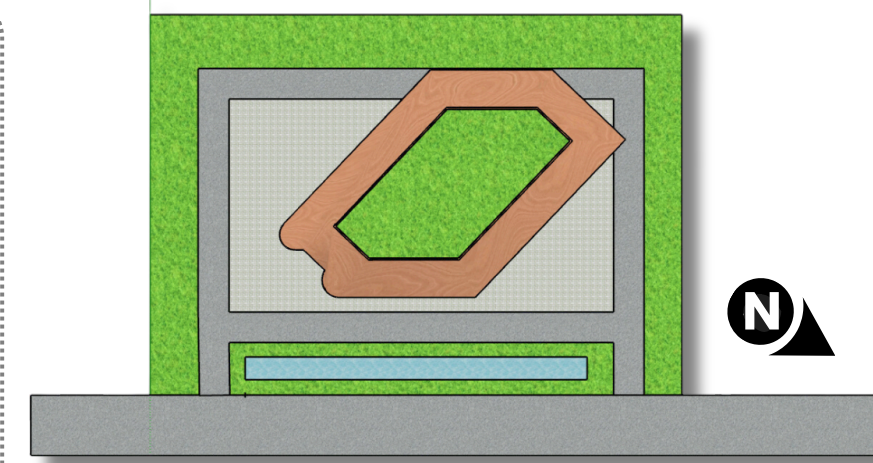
Peletakan sensor cahaya pada setiap selubung kaca bangunan, untuk mengatur lampu

WATER SKIN



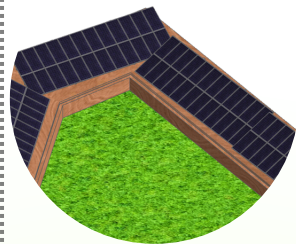
Peletakan sensor cahaya pada setiap selubung kaca bangunan, untuk mengatur lampu

SIDE PLAN



Selubung bangunan cenderung pada arah utara dan selatan

SOLAR PANEL



Penggunaan solar panel dengan sistem off grid pada bangunan

WATER HARVESTING

Sistem RWH untuk flush dan penyiraman air tanaman

filter dan clean water tank
dirty water tank
flush toilet

PENGUKURAN

Total Subproject Floor Area	Final Energy Use	Final Water Use
4,500.00 m ²	13,806.09 kWh/Month	502.93 m ³ /Month
Energy 60.72%	Water 41.87%	Materials 23.19%
Energy Savings 147.88 MWh/Year	Water Savings 3,139.13 m ³ /Year	

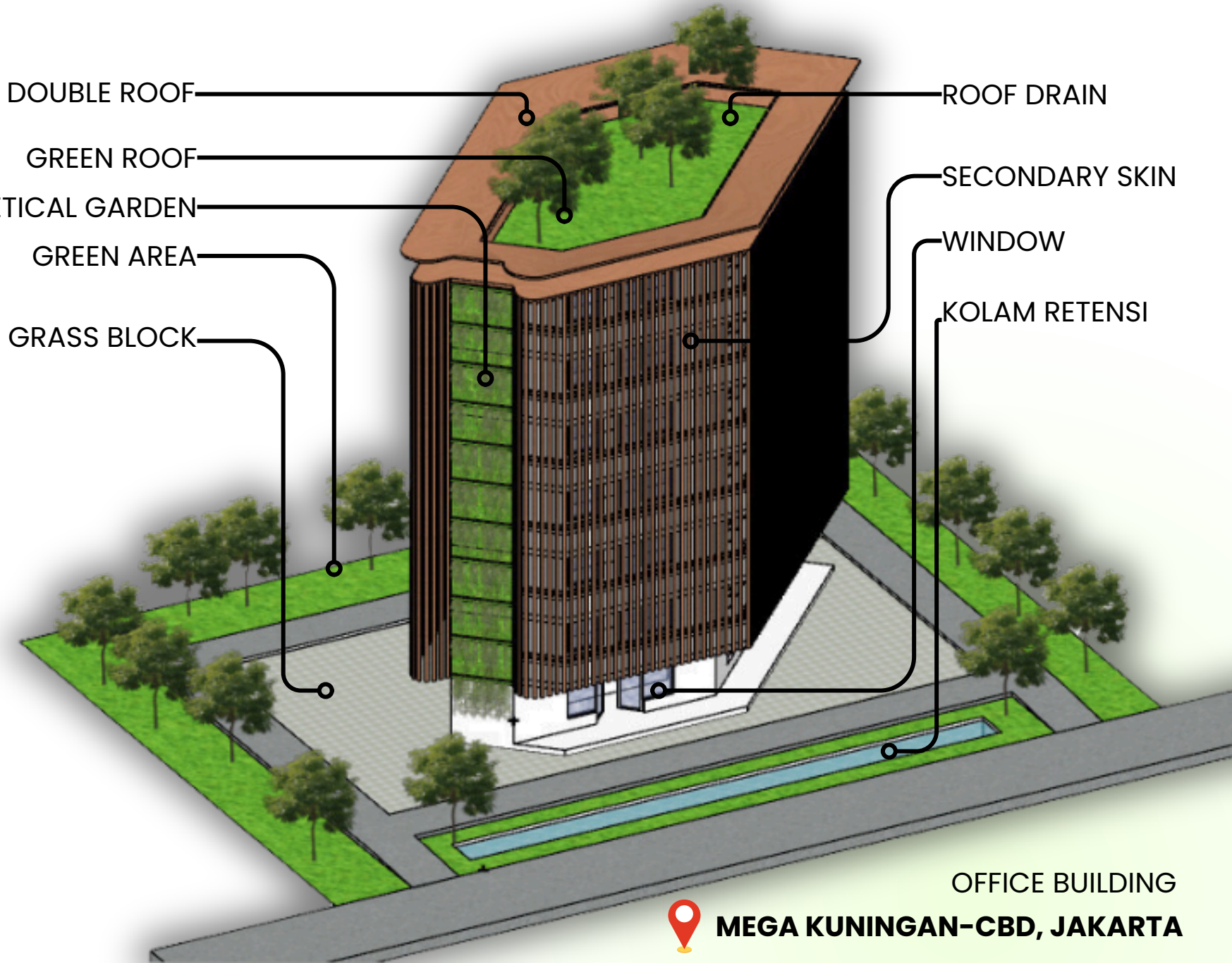
PROFIL BANGUNAN

Bangunan kantor dengan konsep open plan

Luas Tapak: 3,500 sqm
Jumlah Lantai: 7
Jumlah Luas: 4,500sqm Lantai

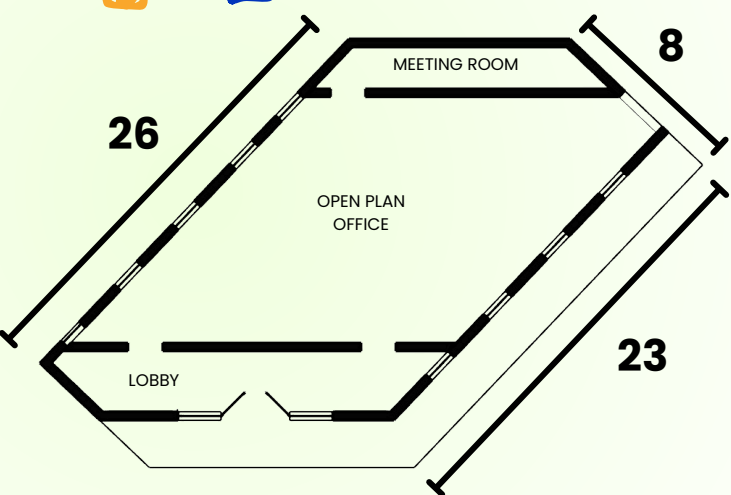
Memiliki Tingkat cahaya matahari yang tinggi dan desain untuk ventilasi alami

- DOUBLE ROOF
- GREEN ROOF
- VERTICAL GARDEN
- GREEN AREA
- GRASS BLOCK
- ROOF DRAIN
- SECONDARY SKIN
- WINDOW
- KOLAM RETENSI



OFFICE BUILDING

MEGA KUNINGAN-CBD, JAKARTA



FLOOR PLAN



PROFIL BANGUNAN

Offices

DASHBOARD

VERSION 2.1.5 ▾

FILE ▾

SAVE

Total Subproject Floor Area

4,500.00
m²

Final Energy Use

13,806.09
kWh/Month

Final Water Use

502.93
m³/Month

Base Case Utility Cost

48,659.65
Thousand Rp/Month

Utility Cost Reduction

213,798.82
Thousand Rp/Month

Incremental Cost

83,704.01
Thousand Rp



Design



Energy 60.72%



Water 41.87%



Materials 23.19%

Operations

HIDE RESULTS ^

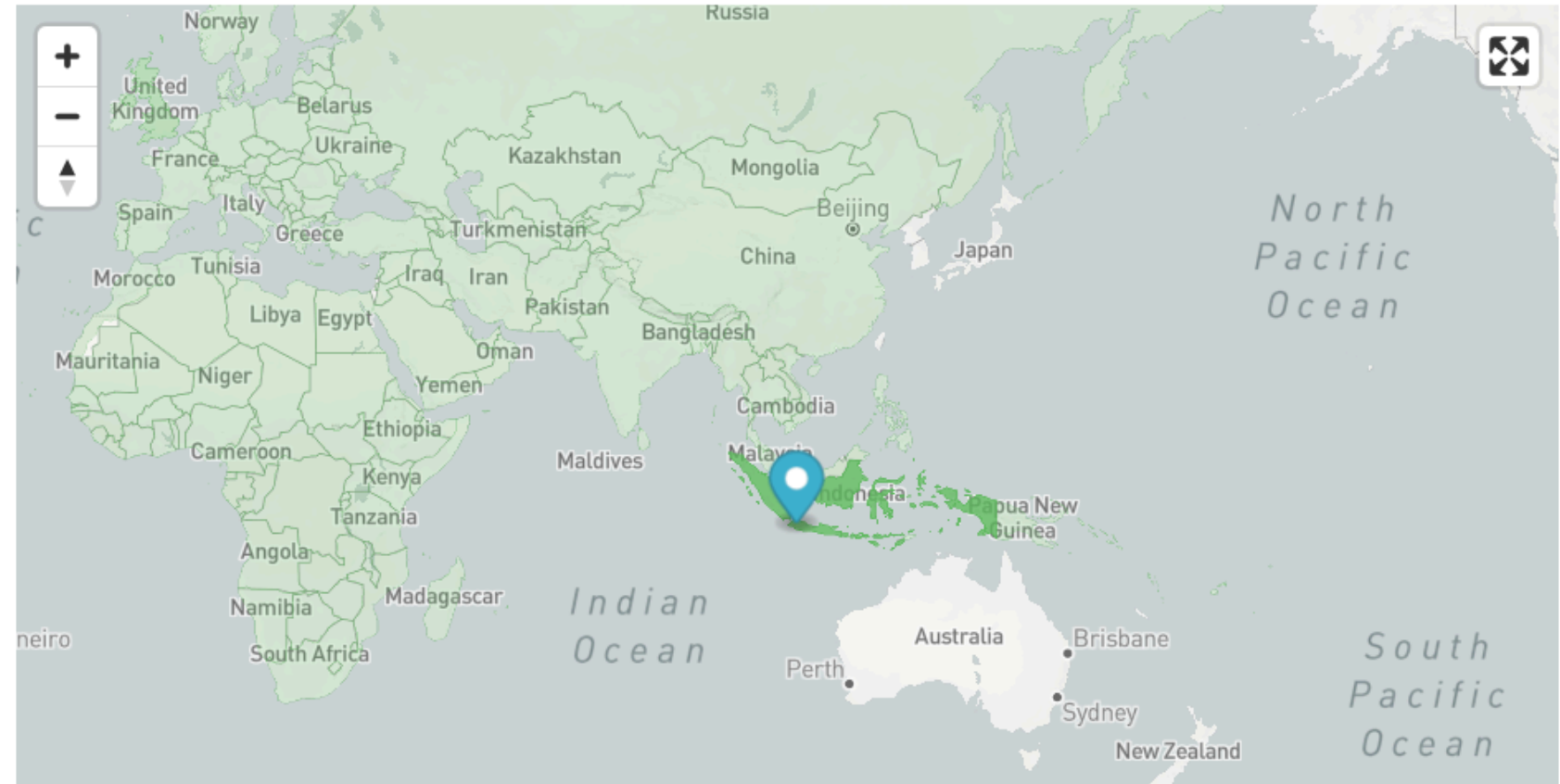
Location

Country

Indonesia ▾

City

Jakarta ▾



ENERGY SAVING 60,72%

ENERGY USE



English ▾

Homepage



Dea Yuniar ▾

Offices

DASHBOARD

VERSION 2.1.5 ▾

FILE ▾

SAVE

Payback in Years 0.03 Yrs.	Operational CO ₂ Savings 129.91 tCO ₂ /Year	Embodied Energy Savings 641.75 MJ/m ²	Energy Savings 147.88 MWh/Year	Water Savings 3,139.13 m ³ /Year	Carbon Emissions 145.60 tCO ₂ /Year
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HIDE RESULTS ^

- Design
- Energy 60.72%
- Water 41.87%
- Materials 23.19%
- Operations

Energy Efficiency Measures

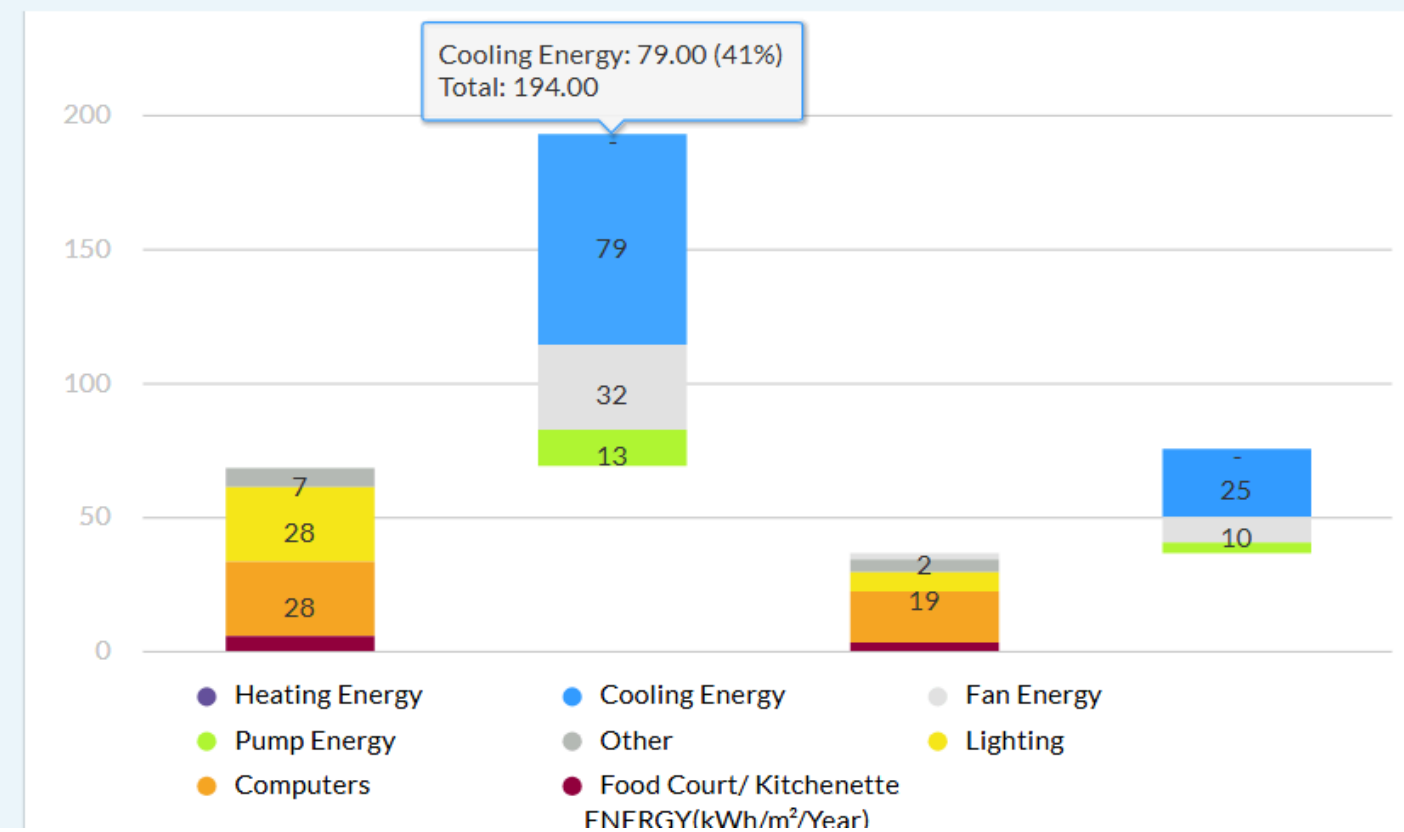
Choose energy efficiency measures to achieve savings of at least 20%.

East %	<input type="text" value="0"/>	West %	<input type="text"/>
Northea...	<input type="text"/>	Northwe...	<input type="text"/>
Southea...	<input type="text"/>	Southwe...	<input type="text"/>

- OFE02 Reflective Paint/Tiles for Roof - Solar Reflectivity (albedo) of 0.7
- OFE03 Reflective Paint for External Walls - Solar Reflectivity (albedo) of 0.7
- OFE04 External Shading Devices - Annual Average Shading Factor (AASF) of 0.58
AASF
- OFE05 Insulation of Roof : U-value of 0.393
U-value

60.72% Meets EDGE Energy Standard

EDGE ADVANCED



ELEMENTS:

- OFE01 Reduced Window to Wall Ratio - WWR of 26.12%
- OFE04 External Shading Devices
- OFE05 Insulation of Roof : U-value of 0.393
- OFE06 Insulation of External Walls : U-value of 0.47
- OFE09 Natural Ventilation with Operable Windows and No A/C
- OFE10 Ceiling Fans for Office Spaces
- OFE24 Energy-Saving Light Bulbs - Internal Spaces
- OFE26 Lighting Controls for Corridors and Staircases
- OFE28 Occupancy Sensors in Open Offices
- OFE30 Solar Photovoltaics - 30% of Total Energy Use

Offices

DASHBOARD

VERSION 2.1.5 ▾

FILE ▾

SAVE

Payback in Years

0.03

Yrs.

Operational CO₂ Savings

129.91

tCO₂/Year

Embodied Energy Savings

641.75

MJ/m²

Energy Savings

147.88

MWh/Year

Water Savings

3,139.13

m³/Year

Carbon Emissions

145.60

tCO₂/Year



HIDE RESULTS ^

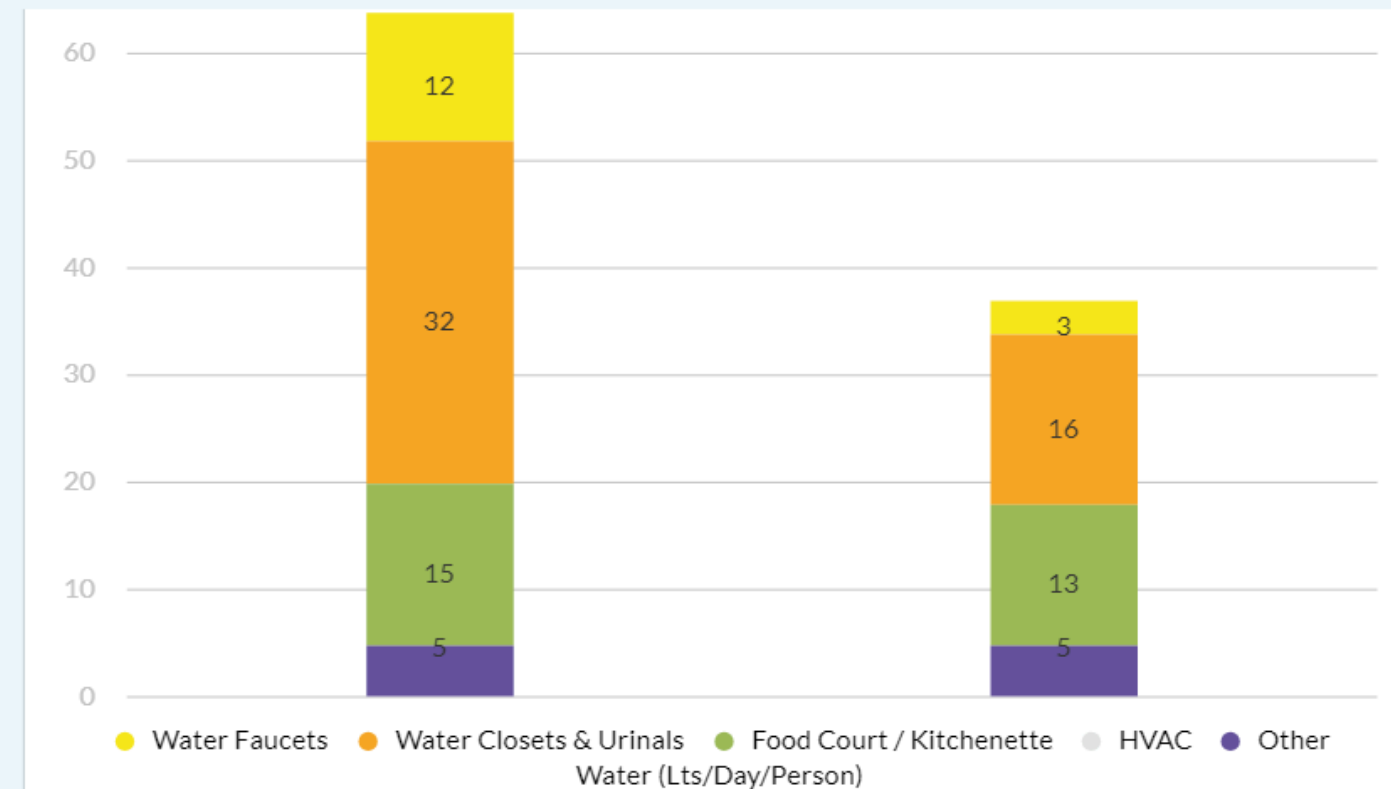
Design
 Energy 60.72%
 Water 41.87%
 Materials 23.19%
 Operations

Water Efficiency Measures

Choose water efficiency measures to achieve savings of at least 20%.

- OFW02* Dual Flush for Water Closets in All Bathrooms - 6 L/first flush and 3 L/secon...
 Single Flush/Flush Valve
 High Vol... Low Vol...
- OFW03* Water-Efficient Urinals in All Other Bathrooms - 2 L/flush
 L/flush
- OFW04* Water-Efficient Faucets for Kitchen Sinks - 4 L/min
- OFW05 Condensate Water Recovery
- OFW06 Rainwater Harvesting System - 50% of Roof Area Used for Rainwater Collect...
 % of Roo...

41.87% Meets EDGE Water Standard



ELEMENTS:

- OFW02 Dual Flush for Water Closets in All Bathrooms
- OFW03 Water-Efficient Urinals in All Other Bathrooms – 2 L/flush
- OFW06 Rainwater Harvesting System
- OFW07 Grey Water Treatment and Recycling System

MATERIAL SAVING 23,19%

MATERIAL USE



English ▾

Homepage



Dea Yuniar ▾

Offices

DASHBOARD

VERSION 2.1.5 ▾

FILE ▾

SAVE

Payback in Years

0.03

Yrs.

Operational CO₂ Savings

129.91

tCO₂/Year

Embodied Energy Savings

641.75

MJ/m²

Energy Savings

147.88

MWh/Year

Water Savings

3,139.13

m³/Year

Carbon Emissions

145.60

tCO₂/Year



HIDE RESULTS ^

✓ Design
 ✓ Energy 60.72%
 ✓ Water 41.87%
 ✓ Materials 23.19%
 Operations

Materials Efficiency Measures

Choose building material options to achieve savings of at least 20%, indicating thickness.

	Thickness (mm)	Steel Rebar (kg/m ²)
	<input type="text"/>	<input type="text"/>

Roof Construction
Type 1

OFM02* In-Situ Concrete with >25% GGBS ▾

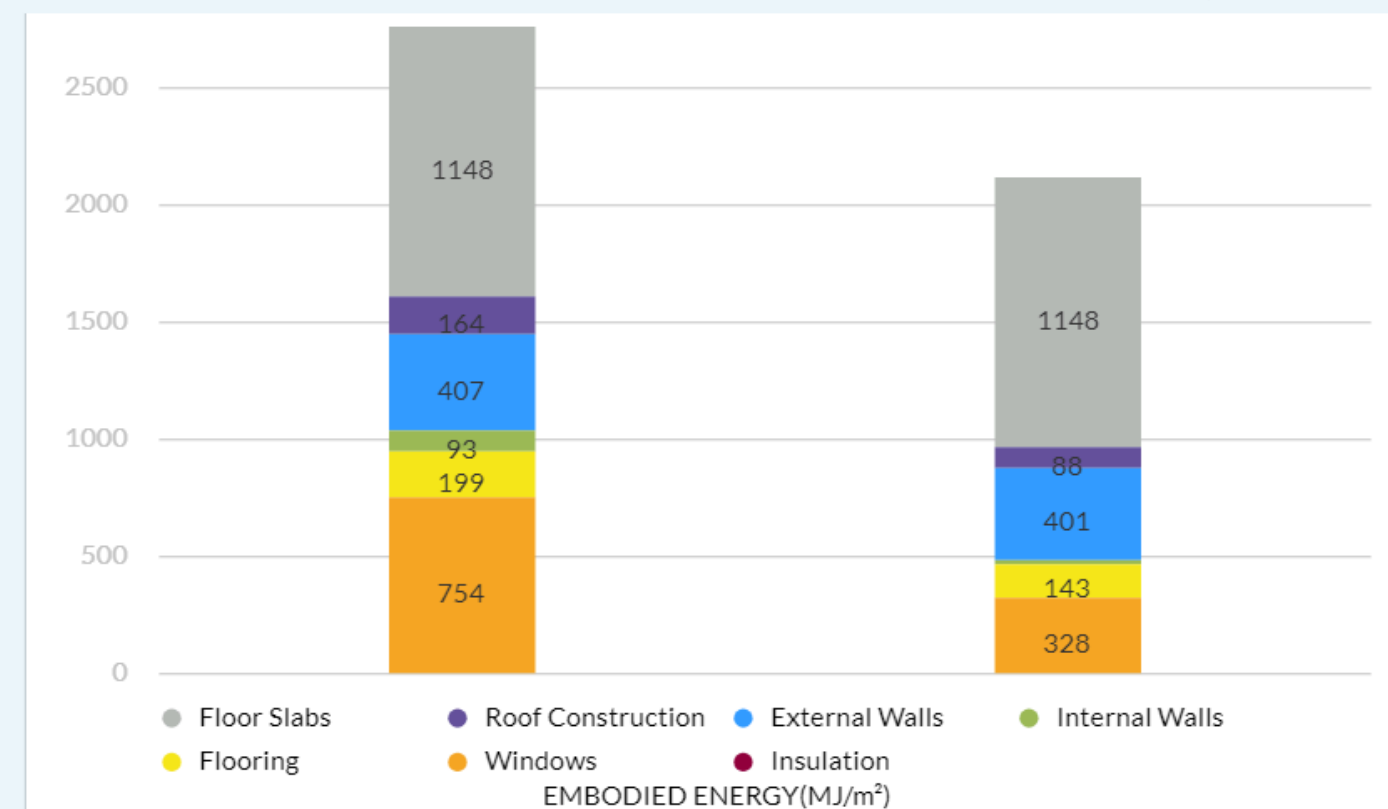
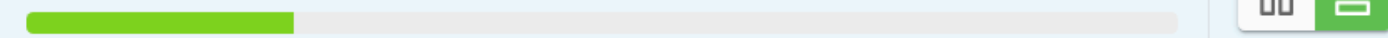
Proportion %	Thickness (mm)	Steel Rebar (kg/m ²)
<input type="text" value="100"/>	<input type="text"/>	<input type="text"/>

External Walls
Type 1

OFM03* Aluminium Profile Cladding ▾

Proportion %

23.19% Meets EDGE Material Standard



ELEMENTS:

Floor Slabs

In-Situ Reinforced Concrete Slab

Roof Construction

Type 1

In-Situ Concrete with >25% GGBS

External Walls

Type 1

Aluminium Profile Cladding

Internal Walls

Type 1

Cellular Light Weight Concrete Blocks