



**Step by Step Manual for the Registration of
Buildings under the Sustainable Energy
Low Carbon Building Assessment
(LCB - GreenPASS)
on Building Energy Data Online Monitoring
System (BEDOS)**

PART A

FOR NEW BEDOS ACCOUNT REGISTRATION



BEDOS About Contact

Login Register

BEDOS
BUILDING ENERGY DATA ONLINE MONITORING SYSTEM
(For Sustainable Energy Low Carbon Building Assessment-GreenPASS Application)

greenPASS
SUSTAINABLE ENERGY LOW CARBON BUILDING ASSESSMENT

seda
Sustainable Energy Development Authority
MALAYSIA

Register

Name

E-Mail Address

Password

Confirm Password

Register

Register your BEDOS Account at:
URL: <http://www.seda.gov.my/bedos>

Then, click **‘Register’** to create account

PART B

FILL IN YOUR BUILDING INFORMATION



The screenshot displays the BEDOS dashboard interface. On the left, a dark sidebar contains the user profile 'zulkhairee zabani' with the SEDA logo and a 'MAIN NAVIGATION' menu. The 'Building Information' menu item is expanded, and the 'Add New Building' option is highlighted with a red box. A red circle with the number '1' is positioned to the left of this menu item. The main dashboard area features three summary cards: '71 Building Registered' (blue), '65 Verified' (green), and '6 Waiting For Verification' (orange). Below these cards, a section titled 'Wisma Sumber Alam Complex' contains a bar chart labeled 'Energy Consumption'. The chart shows monthly energy consumption from 2014-01 to 2018-12, with values ranging from approximately 240,000 to 350,000 units.

| Year | Energy Consumption (Units) |
|---------|----------------------------|
| 2014-01 | 300,000 |
| 2014-02 | 295,000 |
| 2014-03 | 315,000 |
| 2014-04 | 325,000 |
| 2014-05 | 345,000 |
| 2014-06 | 290,000 |
| 2014-07 | 310,000 |
| 2014-08 | 305,000 |
| 2014-09 | 295,000 |
| 2014-10 | 330,000 |
| 2014-11 | 345,000 |
| 2014-12 | 305,000 |
| 2018-01 | 295,000 |
| 2018-02 | 325,000 |
| 2018-03 | 245,000 |
| 2018-04 | 295,000 |
| 2018-05 | 265,000 |
| 2018-06 | 285,000 |
| 2018-07 | 295,000 |
| 2018-08 | 240,000 |
| 2018-09 | 265,000 |
| 2018-10 | 340,000 |
| 2018-11 | 305,000 |
| 2018-12 | 245,000 |

Upon logging into BEDOS, click the **Building Information** tab and select ① **'Add New Building'** to fill in required information of the building that is to be registered

The screenshot displays the 'Building Management' interface in the BEDOS system. The user 'zulkhairee zabani' is logged in. The main navigation menu on the left includes 'Dashboard', 'Building Information', 'Add New Building', 'Building List', 'Data Management', 'Monitoring & Reporting', 'GreenPASS Certification', 'User Management', and 'Group Management'. The 'Building Information' menu item is highlighted with a red circle containing the number '2'. The 'A - General Information' tab is also highlighted with a red box. The form contains the following fields:

- Building Name ***: Text input field with value 'Building Name'.
- Building Address ***: Text input field with value 'Building Address Line 1'.
- Building Address Line 2**: Text input field with value 'Building Address Line 2'.
- Building Owner Name/Organisation ***: Text input field with value 'Building Owner Name/Organisation'.
- Postcode ***: Text input field with value '12345'.
- City ***: Text input field with value 'City'.
- Telephone ***: Text input field with value '01X12345678'.
- Fax**: Text input field with value '01X12345678'.
- Owner Email ***: Text input field with value 'abc@example.com'.
- Contact Person Name ***: Text input field with value 'John Doe'.
- Contact Person Telephone ***: Text input field with value '01X12345678'.
- Contact Person Fax**: Text input field with value '01X12345678'.
- State ***: Dropdown menu with value 'Please Select'.
- Local Authority ***: Dropdown menu with value 'Please Select'.
- Electricity Account Number ***: Text input field with value 'Electricity Account number'.
- Electricity Tariff ***: Dropdown menu with value 'Please Select'.

A note at the bottom right states: '* if multiple account number, please separate by '/'. e.g. 1234/4567'.

The primary information needed is the building's ② **General Information** such as **Building Name**, **Building Address** and **Contact Person details**. All the information with red starred(*) are compulsory

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B - Building Physical Information

Physical building background

Please select

Net Floor Area *

Net Floor Area

m²

Total No of Basement Floor

Total No of Basement Floor

Age Of Building

Age of building

Total Gross Floor Area *

Total Gross Floor Area

m²

Air-conditioned Area

Air-conditioned Area

m²

Total No of Storey(s)

Total No of Storey(s)

Total No of Building Block

Total No of Building Block

Carpark Area

Carpark Area

m²

Electrical Drawing

Choose File

No file chosen

Floor Plan Layout

Choose File

No file chosen

C - Building Operating Information

Total number of occupants

Total number of occupants

Occupancy rate (current year)

Occupancy rate (current

%

Building operating hours schedule per week

Building operating hours schedule per week

Hours

Chiller Available?

District Cooling Available?

Part B includes ③ **Building Physical Information** such as **Net Floor Area**, **Age Of Building**, **Total No of Storey(s)** etc. All the information with red starred(*) are compulsory

B - Building Physical Information

Physical building background
Please select

Age Of Building
Age of building

Total No of Storey(s)
Total No of Storey(s)

Electrical Drawing
Choose File No file chosen

Net Floor Area *
Net Floor Area m²

Total No of Basement Floor
Total No of Basement Floor

Total Gross Floor Area *
Total Gross Floor Area m²

Air-conditioned Area
Air-conditioned Area m²

Total No of Building Block
Total No of Building Block

Carpark Area
Carpark Area m²

Floor Plan Layout
Choose File No file chosen

4 **C - Building Operating Information**

Total number of occupants
Total number of occupants

Occupancy rate (current year)
Occupancy rate (current) %

Building operating hours schedule per week
Building operating hours schedule per week Hours

Chiller Available?

District Cooling Available?

Part C indicates **④ Building Operating Information** such as the **Total number of occupants** and **Building operating hours schedule per week**

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D - Building Maintenance Information

Manpower

Manpower

Person

Maintanance Contractor

Maintanance Contractor

Availability of energy management engineer

Please select

Contact Person

Contact Person

Contact Person Email

abc@example.com

Training of Maintenance Workers

Training of Maintenance Workers

cumulative hrs/year

* Email will be sent to this email for them to login

Save!

Part D includes ⑤ **Building Maintenance Information**. Once this section is completed, click **'Save!'**

PART C

FOR DATA MANAGEMENT



The screenshot displays the BEDOS Building Management interface. On the left, the navigation menu is expanded to 'Data Management', where 'Building List' is highlighted with a red circle and the number 6. The main content area shows a search filter with fields for 'Search', 'State', 'Building Category', and 'Local Authority', and a green 'Search' button. Below the filter is a table titled 'Building List' with the following columns: '#', 'Building Name', 'Building Maintenance Contractor', 'Status', and 'Action'. The table contains one row with the following data: '# 1', 'Building Name Example', 'Building Maintenance Contractor', 'Status VERIFIED', and 'Action Update Energy Consumption View Energy Consumption'. The 'Update Energy Consumption' button is highlighted with a red circle and the number 7.

Next, select ⑥ 'Building List' under the Data Management tab. Then, click on the ⑦ 'Update Energy Consumption' to fill in your monthly data consumption

The screenshot shows the BEDOS Building Management interface. The top navigation bar includes the user profile 'zulkhairee zabani' and the breadcrumb 'Home > Building > Consumption'. The main content area is titled 'Example Building Consumption' and features a table with columns for months from January to December and an 'Action' column. A green 'Add New' button is highlighted with a red box in the 'Action' column for January. A red circle with the number 8 is overlaid on the table area.

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Select ⑧ 'Add New' to start key in your monthly data consumption

BEDOS zulkhairee zabani

Building Management Consumption

Home > Building > Consumption

Consumption

Year: 2019

| Bulan/Tahun | Parameter | | | | | | |
|-------------|--|---|---|---------------------------------------|--|---------------------------|--------------------------------|
| | Tariff Tenaga Electric | Penggunaan Tenaga GDC Chilled Water (for non-residential) | | | Penggunaan Air | Bil Utiliti | |
| | Electricity Consumption (kwh) *Required | Maximum Demand (kw) *optional | Energy Variable Charges (RTH) (if available) | Demand Charges (RT) (if available) | Water Consumption (m ³) *optional | Bil Air (RM) *optional | Bil Elektrik (RM) *optional |
| January | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| February | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| March | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| April | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| May | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

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In this section, monthly **⑨ Electricity Consumption(kwh)** of the target year and baseline year is to be filled up. Then, click **‘save!’** to save your data in the system

PART D

FOR DATA MONITORING AND REPORTING



The screenshot displays the BEDOS (Building Energy Data Operating System) interface. The top navigation bar includes the user profile 'zulkhairee zabani' and the role 'SEDA'. The main navigation menu on the left is expanded, with 'Building Data' highlighted under the 'Monitoring & Reporting' section. The main content area shows a 'Building List' table with the following data:

| ID | Building Name | Status | Action |
|----|---------------|----------|------------|
| 1 | Example | VERIFIED | Show Graph |

Red circles with numbers 10 and 11 are overlaid on the 'Building Data' menu item and the 'Show Graph' button, respectively, to indicate the steps for monitoring building data.

In order to monitor your building data, click on ⑩ **'Building Data'** under the **Monitoring & Reporting** tab. Then, select ⑪ **'Show Graph'**



All these graph will be displayed on your screen and show all the data that you want. Now, you can start monitoring your building data

PART E

FOR CERTIFICATION PURPOSES



The screenshot displays the BEDOS web application interface. The top navigation bar includes the user profile 'zulkhairee zabani' and the role 'SEDA'. The main navigation menu on the left is highlighted with a red circle labeled '12', showing the 'Request For Certification' option. The main content area is titled 'Certification Request' and contains a 'Building List' table. The table has columns for 'ID', 'Building Name', 'Building Maintenance Contractor', 'Status', and 'Action'. A red circle labeled '13' highlights the 'Set Baseline/Target Year' button in the 'Action' column for the first row, which has an ID of '1' and a status of 'SUBMITTED'.

| ID | Building Name | Building Maintenance Contractor | Status | Action |
|----|---------------|---------------------------------|-----------|--------------------------|
| 1 | Example | | SUBMITTED | Set Baseline/Target Year |

Next, under the **GreenPASS Certification** tab, select ⑫ **‘Request For Certification’**. Proceed to click on ⑬ **‘Set Baseline/Target Year’** placed in the action column for the building that has been registered

The screenshot displays the BEDOS Building Management interface. The top navigation bar includes the user profile 'zulkhairee zabani' and the SEDA logo. The main content area is titled 'Building Management' and 'Example Building'. It features two dropdown menus for 'Baseline Year' and 'Target Year', both currently set to 'Please select'. A red box highlights the 'Calculate' button. To the right of the button is a large red circle containing the number '14'. The footer contains the copyright notice 'Copyright © 2018-2019 SEDA MALAYSIA. All rights reserved.' and the version number 'Version 0.1'.

Select the relevant **Baseline Year** and **Target Year** then click on **⑭ 'Calculate'**. The system will then proceed to calculate the energy savings that has been achieved based on the baseline and target year selected.

| Month | Baseline Consumption data (kWh) (2016) | BEI Baseline Year (2016) | Performance Data (kWh/Year) (2018) | BEI Target Year (2018) | Energy Saving (kWh) | Energy Saving (%) |
|--------------|--|--------------------------|------------------------------------|------------------------|---------------------|-------------------|
| 1 | 985,678 | 97.57 | 322,324.00 | 31.91 | 663,354.00 | 67.30 |
| 2 | 876,679 | 86.78 | 234,325.00 | 23.19 | 642,354.00 | 73.27 |
| 3 | 676,578 | 66.97 | 434,233.00 | 42.98 | 242,345.00 | 35.82 |
| 4 | 876,886 | 86.80 | 343,235.00 | 33.97 | 533,651.00 | 60.86 |
| 5 | 987,665 | 97.76 | 435,421.00 | 43.10 | 552,244.00 | 55.91 |
| 6 | 886,879 | 87.79 | 344,525.00 | 34.10 | 542,354.00 | 61.15 |
| 7 | 987,790 | 97.78 | 423,456.00 | 41.92 | 564,334.00 | 57.13 |
| 8 | 678,799 | 67.19 | 353,422.00 | 34.98 | 325,377.00 | 47.93 |
| 9 | 898,766 | 88.96 | 345,432.00 | 34.19 | 553,334.00 | 61.57 |
| 10 | 989,867 | 97.98 | 235,265.00 | 23.29 | 754,602.00 | 76.23 |
| 11 | 789,987 | 78.20 | 454,354.00 | 44.97 | 335,633.00 | 42.49 |
| 12 | 989,687 | 97.96 | 456,352.00 | 45.17 | 533,335.00 | 53.89 |
| Total | 10,625,261.00 | 87.64 | 4,382,344.00 | 36.15 | 6,242,917.00 | 58.76 |

[Submit for Certification](#)

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The final step is to select ⑮ **‘Submit for Certification’**. The registration process is now complete. An email will be sent to the contact person once it is approved. The name of the building will be placed in the certified list of buildings

Thank you.