



ENERGY AND ENVIRONMENTAL PERFORMANCE BAROMETER

TECHNICAL GUIDE 2023

APRIL 2023

VERSION 12

CONTENTS

CONTENTS	2
COLLECTION KIT	3
PRESENTATION OF THE DATA COLLECTION FILE	3
DEFINITION OF DATA ENTRIES.....	6
BUILDING TYPES	17
APPENDIX: A GUIDE TO RESILIENCE DATA ENTRY	20

Contributions to the database are voluntary. OID pays particular attention to data confidentiality of process quality. All collected data remain confidential. Data collection and processing follow the methodological framework defined by the OID team with the support of a group of experts and audited annually by PwC.



COLLECTION KIT

The collection kit sent to contributors includes the following files:

- The **presentation leaflet for the 2023 edition** (pdf format).
- The **data collection file** for data entry (Excel format).
- The **2023 technical guide (this document)** presents the data collection tools and defines the data entries (pdf format).

PRESENTATION OF THE DATA COLLECTION FILE

The collection file, in Excel format, allows data to be entered by the contributor.

For contributors who participated in the last edition of the barometer, a file pre-filled with the data transmitted in 2022 and, if necessary, **default values** assigned by the OID, will be made available.

For new contributors, only the data to which the OID assigns default values will be pre-filled.

The default values are given in the table defining the data entries, in the next section of this guide.

The **data collection file**, in Excel format, includes **3 tabs**:

- **0_Guidelines**: Details of each data item collected in the following tab (heading, description, type, format, default value, importance level). It also allows you to follow the filling rate live. The content of this tab is detailed in this guide (see [DEFINITION OF DATA ENTRIES](#)).
- **1_Building_types**: Definition of building types and sub-types. The content of this tab is also detailed in this guide (see [BUILDING TYPES](#)).
- **2_Data collection**: Data to be filled in by the contributor. Each column corresponds to a data and each line to a building. This is the only tab to be filled in by the contributor.

[Click here to download the data collection file](#)

0_Guidelines

GREEN BUILDING OBSERVATORY						
The collection file contains 144 columns (tab "2_Data_collection"), each corresponding to a type of data. Each row corresponds to ONE building in ONE year (the reporting year). If data is provided for several years for a building, the row must be duplicated. The table below details the content of the columns (column no., letter used to identify it in tab 2, heading, description, data format, level of importance, and automatically updated completion level). Some columns have default values, which will be applied when left empty by the user: they are indicated by the mention (default).						
N°	Ref	Heading	Description	Format	Importance	Completion (live)
1	A	Member reference - OID	Member reference assigned at the time of joining.	Leave blank	Internal OID data	0%
2	B	Building code - OID	Unique building code assigned by the OID.	Leave blank	Internal OID data	0%
3	C	Building type - OID	The building types are defined by the Energy & Data Management working group. They are determined according to the general data of the building.	Leave blank	Internal OID data	0%
4	D	Site or building	0-Site (group of undifferentiated buildings) 1-Building (independent building) 2-Lot (part of a building)	Drop-down list	Required	71%
5	E	Building type	The full list of building types and sub-types is detailed in tab "1_Building_types"	Drop-down list	Required	100%
6	F	Building sub-type	The drop-down list options displayed here are conditioned by the building type selected in the previous menu.	Drop-down list	Required	29%
7	G	Building type - Member	Specify the building type specific to your organisation. This feature allows the OID to narrow down the benchmark perimeter.	Text	Recommended	0%
8	H	Building name	Public or internal name of the building (if applicable).	Text	Required	21%
9	I	Building code - Member	Code of the building internal to the organisation.	Text	Recommended	21%
10	J	Building management entity	Indicate the building management entity within your organisation (if applicable).	Text	Optional	0%
11	K	Life cycle stage	Indicate whether the building is currently in operation or if it is a construction project (2nd option for Bat-ADAPT only). 0-Building in operation (default) 1-New construction	Drop-down list	Required	86%
12	L	Latitude	Enter the latitude (e.g. 48.870472).	Numeric	Optional	0%
13	M	Longitude	Enter the longitude (e.g. 2.345717).	Numeric	Optional	0%
14	N	Street	Number, type, and name of street (e.g. 7 rue de la Paix).	Text	Required	0%
15	O	Postal code	Postal code (e.g. 75002).	Text	Required	0%
16	P	Proximity to public transport	Proximity to public transport (e.g. 500m, 1000m, 1500m, 2000m, 2500m, 3000m, 3500m, 4000m, 4500m, 5000m, 5500m, 6000m, 6500m, 7000m, 7500m, 8000m, 8500m, 9000m, 9500m, 10000m).	Text	Recommended	0%

Tab
selection

DO NOT MODIFY THIS TAB

Using the table features, it is possible to select only part of the data, for example only the data with the highest level of importance (defined in the next section): to do this, click on the small arrow to the right of the "Importance" column header and check the "Required" box

The last column shows the completion level as a progress bar. For example, if 10 buildings are added but the energy consumption of a building is not entered, the completion level for this data (energy consumption) will be 90%.

1_Building_types

The table below details the building types and sub-types determined by the OID after consultation with experts and market players. This table can also be consulted in the technical guide ("Building types" section)		
0	Offices	
0.1	Standard offices	Offices that are neither high-technical-functionality nor high-end luxury offices.
0.2	High-technical-functionality offices	Offices that meet "international standards". Newly built or restructured building. A high-technical-functionality office can accommodate special technical equipment and meets the criteria of today's demand for optimised workspaces. Historically, these offices have met at least 8 of the following 10 criteria: good adaptation to the office function, flexibility of floors, minimum of 2 phone connections, fibre optics, technical rooms per floor, IT security, reception at the main entrance, video surveillance, electronic badges at the reception, remote surveillance. Note: an air-conditioned building is considered to have high technical functionality in this nomenclature.
0.3	High-end luxury offices	A category of iconic sites, linked to the company's image. This site is distinguished from a standard office by the importance of the services dedicated to the individual and by the predominance of commercial representation (at least 30% of the surface area is occupied by the Front Office function), and by the size of its common and reception areas (reception hall, meeting rooms, management offices, auditorium, etc.). Example: Head office.
0.4	Other	Office building not falling into any of the other categories.
1	Commerce	
1.1	Retail park	An open-air site consisting of a group of independent buildings housing commercial activities (includes street malls).
1.2	Shopping Centre (excluding retail parks)	A collection of shops connected by covered common areas.
1.3	Food supermarket	A single, standalone building dedicated to the retail sale of food products.
1.4	Large specialised store	A single, standalone building dedicated to specialised retailing: household goods, personal goods, leisure, DIY, etc.
1.5	Wholesale	A single, standalone building dedicated to wholesale.
1.6	Not in list (other than High street)	Other types of commercial building (e.g. small food retailers not listed as food supermarkets).
2	Residential	
2.1	Single family housing	Single family houses (including allotment/housing development).
2.2	Collective housing	Collective housing in blocks of flats or residences (excluding hotels and hostels). Specify if it is social housing in box G ("Building type - Member").
3	Mixed	
3.1	Mixed - High-street retail + Offices	Duplicate the line and indicate in box G ("Building type - Member") whether it is the retail part or the office/residential part. Enter the consumption of each part on the corresponding line.
3.2	Mixed - High-street retail + Residential	
3.3	Mixed - Other	
4	Logistics	
4.1	Storage at room temperature	

DO NOT MODIFY THIS TAB

2_Data_collection

[illegible]

DATA TO BE FILLED IN BY THE CONTRIBUTOR

DEFINITION OF DATA ENTRIES

The collection file has 144 columns. Each column corresponds to distinct data entry. **Each row corresponds to ONE building in ONE year** (the reporting year). If data is provided for several years for a building, the row should be duplicated and only the variable categories modified.

In addition, when the column has a **default value**, this will be indicated by the word **(default)** in the table below.



To preserve certain functionalities such as drop-down menus, it is necessary to fill the file with "Values" (right click, under "Paste Options", select "Values (V)")

The table on the next page details the type and format of data expected for each column of the collection file. One row of the table and its description is shown below:

Column reference in Excel	Title of the column in the collection file	Description of the column content. Choices of drop-down lists are detailed when applicable.	Expected data format
AD	Main energy used for heating	0-Not applicable 1-Electricity 2-Gas 3-Fuel oil 4-District heating network 5-Thermal solar 6-Geothermal 7-Wood 8-Other	Drop-down list

The colour of the box 'Column reference in Excel' indicates the **level of importance** of the data:

A	Internal OID data filled in by the OID
A	Data required for the analysis and calculation of indicators
A	Data recommended for a more accurate analysis
A	Optional data

The different **data formats** are as follows:

- Leave blank
- Drop-down list
- Text
- Year: integer number between 1000 and 2999
- Numeric: unit and/or range are specified when appropriate
- Date: dd/mm/yyyy format

Ref	Heading	Description	Format
1. OID DATA			
A	Member reference	Member reference assigned at the time of joining.	Leave blank
B	Building code - OID	Unique building code assigned by the OID.	Leave blank
C	Building type - OID	The building types are defined by the Energy & Data Management working group. They are determined according to the general data of the building.	Leave blank
2. ADMINISTRATIVE DATA			
D	Site or building	0-Site (group of undifferentiated buildings) 1-Building (independent building) 2-Lot (part of a building)	Drop-down list
E	Building type	The full list of building types and sub-types is given in this guide (see BUILDING TYPES) and in tab 1_Building_types of the collection file.	Drop-down list
F	Building sub-type	The drop-down list options displayed here are conditioned by the building type selected in the previous menu.	Drop-down list
G	Building type – Member	Specify the building type specific to your organisation. This feature allows the OID to narrow down the benchmark perimeter.	Text
H	Building name	Public or internal name of the building (if applicable).	Text
I	Building code – Member	Code of the building internal to the organisation.	Text
J	Building management entity	Indicate the building management entity within your organisation (if applicable).	Text
K	Life cycle stage	Indicate whether the building is currently in operation or if it is a construction project (2 nd option for Bat-ADAPT only). 0-Building in operation (default) 1-New construction	Drop-down list
L	Latitude	Enter the latitude (e.g. 48.870472).	Numeric
M	Longitude	Enter the longitude (e.g. 2.345717).	Numeric
N	Street	Number, type, and name of street (e.g. 7 rue de la Paix).	Text
O	Postal code	Postal code (e.g. 75002).	Text
P	City	City in capital letters (e.g. PARIS).	Text
Q	Region or county	If applicable to the country.	Text
R	Country or territory	Country or territory (select from the drop-down menu).	Drop-down list
3. GENERAL DATA			
S	Year of construction	Year of the building permit. If not, indicate the period of construction.	Year
T	Reglementation thermique (France only)	Specify the 'réglementation thermique' applicable to the building. 0-No thermal regulation or outside France 1-RT 1976 2-RT 1988 3-RT 2000 4-RT 2005 5-RT 2012 6-RE 2020	Drop-down list

Ref	Heading	Description	Format
U	Net floor area	Net floor area = sum of the floor areas of each enclosed and covered level	m ²
V	Gross floor area	Gross floor area = Net floor area - Area of structural elements For shopping centres, enter the GLA (gross leasing area): GLA = Net floor area + surface area of canopies, external landings, and technical sheathing	m ²
W	Number of floors excluding basement	Number of levels excluding basement (minimum of 1 level, the ground floor).	Numeric
X	Year of last major renovation	A major renovation is defined differently for each organisation.	Year
Y	High-rise or Haussmannian building	Specify whether the building is a high-rise (the definition may depend on the country the building is located) or a Haussmannian building (in the historical sense, applicable to Paris only). 0-Not applicable (default) 1-High-rise 2-Haussmannian	Drop-down list
Z	Etablissement recevant du public (France only)	Specify whether the building is an ERP (shopping centre, retail outlet, railway station, hospital, hotel, restaurant, administration, education establishment, sports hall, reception facility, etc.). 0-No 1-Yes 2-Not applicable (outside France)	Drop-down list
AA	Heritage listing	Specify whether the building is listed as heritage. 0-No (default) 1-Yes	Drop-down list
AB	Bioclimatic architecture	A bioclimatic architecture design takes into consideration climate risks in relation to the area where the building is located. The aim is to reduce energy requirements for heating, cooling, and lighting and to be better adapted to climate risks. 0-No (default) 1-Yes	Drop-down list
AC	Adjoining building	An adjoining building shares at least one facade with another building. 0-No 1-Yes	Drop-down list
4. OPERATIONAL DATA			
AD	Main energy used for heating	0-Not applicable 1-Electricity 2-Gas 3-Fuel oil 4-District heating network 5-Thermal solar 6-Geothermal 7-Wood 8-Other	Drop-down list
AE	Type of heating system	0-No heating system 1-Air-to-air system 2-Water-to-water system (geothermal) 3-Air-to-water system 4-Electricity (Joule effect) 5-Individual gas heating 6-Collective gas heating 7-District heating network 8-Wood-fired heating 9-Other (fuel oil, coal, etc.)	Drop-down list

Ref	Heading	Description	Format
AF	Cooling energy usage	0-No 1-Yes for thermal comfort and productive use 2-Yes for thermal comfort only 3-Yes for productive only	Drop-down list
AG	Type of cooling system	0-No cooling system 1-Air-to-air system 2-Water-to-water system (geothermal) 3-Water-to-water system (non-geothermal) 4-Air-to-water system 5-Adiabatic cooling 6-District cooling network 7-Other (geocooling, etc.)	Drop-down list
AH	Major IT facilities	A building is considered to have major IT facilities if it has a room dedicated to the following equipment: mainframe computers, servers, data storage and archiving. 0-No (default) 1-Yes	Drop-down list



Data common to BPE and BAT-Adapt



AJ	Presence of a company restaurant	0-No (default) 1-Yes	Drop-down list
AK	Presence of a car park	0-No (default) 1-Yes without charging stations 2-Yes with charging stations	Drop-down list
AL	Heated surface	If different from the total surface area.	m ²
AM	Cooled surface	If different from the total surface area.	m ²
AN	Centralised technical management system	0-No 1-Yes	Drop-down list
AO	Presence of a specific process	Presence of a process capable of affecting the energy consumption (e.g. server room, data centre, printing plant, etc.).	Text

5. OCCUPANCY DATA

AP	Single/Multi-tenant	0-Unoccupied 1-Single-tenant 2-Multi-tenant	Drop-down list
AQ	Number of lots	Number of lots available for rent.	Numeric
AR	Primary owner	Name of the owner of the building. For a condominium (building held in co-ownership), name of the owner with the most shares.	Text
AS	Primary tenant	Name of the tenant of the building. In case of multiple tenants, name of the tenant using the largest area.	Text
AT	Number of months in the year in possession of the building	Indicate the number of months in the year that the asset is held (number between 0 and 12).	0-12
AU	Partial annual occupancy	Indicate if the building was partially occupied during the year (e.g. major renovation during the year, delivery during the year). 0-No 1-Yes	Drop-down list
AV	Vacancy rate	Enter a number between 0 and 100 (0 for a vacant building and 100 for a building occupied 100% of the time).	0-100

Ref	Heading	Description	Format
AW	Intensity of surface use	0-Null (unoccupied) 1-Low (1 person for more than 20 m²) 2-Normal (1 person for 12 to 20 m²) 3-Intense (1 person for 8 to 12 m²)	Drop-down list
AX	Temporal intensity of use (number of hours occupied in the year)	Number of hours the building is occupied per year	hours
AY	No. of keys (accommodation) or rooms (health)	If accommodation, indicate the number of keys.	Numeric
AZ	Specific occupancy of the building	Any information on the occupancy of the building that may have an impact on energy consumption (continuous occupancy, etc.).	Text
BA	Number of occupants in the building	Number of people occupying the building.	Numeric
BB	Presence of a multi-technical operator on site	0-No (default) 1-Yes	Drop-down list
6. ENVIRONMENTAL DATA			
BC	Energy performance label (France only)	0-Not applicable (default) 1-HPE (Haute performance énergétique) 2-THPE (Très haute performance énergétique) 3-HPE EnR* 4-THPE EnR* 5-BBCA (Bâtiment bas carbone) 6-BBC Effinergie Construction 7-BBC Effinergie Rénovation 8-Effinergie + 9-BEPOS – Effinergie 2013 10-Effinergie RE2020 11-Other <i>EnR = Energie Renouvelable</i>	Drop-down list
BD	Other label	Other label not in list.	Text
BE	BREEAM certification - Construction & renovation	0-Not applicable (default) 1-BREEAM (rating unspecified) 2-BREEAM Unclassified 3-BREEAM Pass 4-BREEAM Good 5-BREEAM Very good 6-BREEAM Excellent 7-BREEAM Outstanding	Drop-down list
BF	BREEAM certification - In-use	0-Not applicable (default) 1-BREEAM (rating unspecified) 2-BREEAM Unclassified 3-BREEAM Acceptable 4-BREEAM Pass 5-BREEAM Good 6-BREEAM Very good 7-BREEAM Excellent 8-BREEAM Outstanding	Drop-down list
BG	HQE certification - Construction & renovation	0-Not applicable (default) 1-HQE (rating unspecified) 2-HQE Pass 3-HQE Good 4-HQE Very Good 5-HQE Excellent	Drop-down list

Ref	Heading	Description	Format
		6-HQE Exceptional	
BH	HQE certification - In operation	Same as above.	Drop-down list
BI	LEED certification - Construction & renovation	0-Not applicable <i>(default)</i> 1-LEED (rating unspecified) 2-LEED Certified 3-LEED Silver 4-LEED Gold 5-LEED Platinum	Drop-down list
BJ	LEED certification - In operation	Same as above.	Drop-down list
BK	Other certification	Certification other than BREEAM, HQE or LEED.	Text
BL	Annexe Environnementale (France only)	0-No lease subject to the Annexe or outside France 1-At least 1 building lease subject to the Annexe (signed) 2-At least 1 building lease subject to the Annexe (NOT signed)	Drop-down list
BM	Type of renewables on site	0-Not applicable <i>(default)</i> 1-Wind power 2-Geothermal 3-Solar thermal 4-Solar photovoltaic 5-Biomass 6-Mixed	Drop-down list
BN	Green electricity contract	Specify whether a green electricity contract has been taken out. 0-No 1-Yes	Drop-down list
BO	Environmental performance improvement targets	Specify the objectives for the building (percentage reduction in energy consumption, reduction in the amount of waste produced, etc.).	Text
BP	Reference year of the target	Reference year of the target.	Year
BQ	Value of the reference indicator	Initial value of the indicator considered for the environmental performance improvement target.	Text

7. ENERGY DATA

BR	Entry date	Date of data entry in the collection file (e.g. for 2 June 2023, indicate 02/06/2023). <i>(default) Date when data received by OID</i>	dd/mm/yyyy
BS	Collection method	0-Internal - Manual input 1-Internal - Automated collection 2-External provider - Manual input 3-External provider - Automated collection 4-External provider (manual) and internal consolidation 5-External provider (automated) and internal consolidation 6-Other	Drop-down list
BT	Data source	0-Meter reading 1-From invoice 2-Estimation through ratios 3-Other	Drop-down list
BU	Scope of reporting	This section is essential in order to correctly process the consumption data, which must correspond to the scope of reporting entered here. 0-Common and rental areas 1-Common areas and part of rental areas	Drop-down list

Ref	Heading	Description	Format
		2-Common areas only 3-Rental areas only	
BV	Reporting area	To be filled in if the consumption is not known for the entire floor area of the building. For example, in the case of a multi-tenant building, it may vary from one year to the next if the consumption of certain tenants is not known. It is equal to the total floor space if all the tenants' consumption is known. Reporting area = (m ² of rental space with known consumption) + (share of m ² of common areas) x (number of tenants having reported their data)	m ²
BW	Source year of data	Source year of data (energy, water, and waste).	Year
BX	Testing by a third-party auditor	Specify whether the data provided, and the calculations were verified as part of an audit process or extra-financial reporting. 0-No 1-Yes	Drop-down list
BY	Electricity consumption	Electricity consumption in kWh of final energy, not corrected for any variations, within the scope of reporting indicated in BU.	kWh FE
BZ	Gas consumption (HHV)	Gas consumption in kWh of final energy HHV (Higher heating value), not corrected for any variations, within the scope of reporting indicated in BU. If data is not available in kWh, specify the unit in the comments box (CR).	kWh FE
CA	Fuel oil consumption	Fuel oil consumption in kWh of final energy HHV (Higher heating value), not corrected for any variations, within the scope of reporting indicated in box BU. If data is not available in kWh, specify the unit in the comments box (CR).	kWh FE
CB	Wood consumption	Wood consumption in steres or m ³ within the scope of reporting indicated in BU.	steres or m ³
CC	District heating consumption	District heating consumption in kWh of final energy, not corrected for any variations, within the scope of reporting indicated in box BU.	kWh FE
CD	District heating network	Name of the heating network to which the building is connected (if applicable).	Text
CE	District cooling consumption	District cooling consumption in kWh of final energy, not corrected for any variations, within the scope of reporting indicated in box BU.	kWh FE
CF	District cooling network	Name of the district cooling network to which the building is connected (if applicable).	Text
CG	Total energy consumption - Q1	Total consumption over the 1 st quarter (Q1), in kWh of final energy, all energies combined, not corrected for any variations, within the scope of reporting indicated in BU.	kWh FE
CH	Total energy consumption - Q2	Same for Q2.	kWh FE
CI	Total energy consumption - Q3	Same for Q3.	kWh FE
CJ	Total energy consumption - Q4	Same for Q4.	kWh FE
CK	Total energy consumption – Year	Total annual consumption, in kWh of final energy, all energies combined, not corrected for any variations, within the scope of reporting indicated in BU.	kWh FE
CL	Biomass energy production	Energy production from biomass, in kWh of final energy, not corrected for any variations, within the scope of reporting indicated in BU.	kWh FE
CM	Thermal solar energy production	Ditto for thermal solar.	kWh FE
CN	Photovoltaic solar energy production	Ditto for photovoltaic solar.	kWh FE

Ref	Heading	Description	Format
CO	Other renewable energy production	Ditto for all other renewable generation.	kWh FE
CP	Consommation conventionnelle en EP (France only)	The CEP indicates the theoretical annual primary energy consumption of the building, calculated according to a regulatory thermal simulation. It adds up the consumption for 5 uses: heating, domestic hot water, lighting, auxiliaries (pumps and fans), cooling (air conditioning).	kWh PE
CQ	Comments on energy consumption	Comments and possible clarifications on energy consumption.	Text

8. WATER & WASTE DATA

CR	Data source – Water	0-Meter reading 1-From invoice 2-Estimation through ratios 3-Third-party provider 4-Other	Drop-down list
CS	Water consumption	Water consumption within the scope of reporting indicated in BU.	m ³
CT	Comments on water consumption	Comments and clarifications concerning water consumption.	Text
CU	Data source – Waste	0-From invoice 1-Estimation through ratios 2-Third-party provider 3-Other	Drop-down list
CV	Waste generation	Waste generation, all categories combined.	kg
CW	Waste recycling rate	Percentage of waste recycled. Recycling rate = (kg of waste recycled) / (kg of waste generated) x 100	0-100
CX	Selective sorting	0-No 1-Yes	Drop-down list
CY	Presence of a trash compactor	0-No 1-Yes	Drop-down list
CZ	Comments on waste generation	Comments and clarifications concerning waste generation.	Text

9. DATA ON ENERGY PERFORMANCE IMPROVEMENT

DA	Occupant awareness	0-No action taken (default) 1-One-time action 2-Structured approach at the building stock level	Drop-down list
DB	Engagement of facility managers	0-No (default) 1-Yes	Drop-down list
DC	Governance on energy issues (environmental committee)	0-No (default) 1-Yes	Drop-down list
DD	Revised operation and maintenance contract	0-No (default) 1-YES but with no impact on the energy consumption 2-YES with a potential impact on the energy consumption 3-YES with a commitment to reduce energy consumption	Drop-down list
DE	Relamping work	0-No (default) 1-Yes	Drop-down list
DF	Optimisation of monitoring	0-No (default) 1-Yes	Drop-down list

Ref	Heading	Description	Format
DG	Implementation of a fluid monitoring system	0-No <i>(default)</i> 1-Yes	Drop-down list
DH	Implementation of a sub-meter	0-No <i>(default)</i> 1-Yes	Drop-down list
DI	Installation of presence sensors	0-No <i>(default)</i> 1-Yes	Drop-down list
DJ	Replacement of thermal equipment	0-No <i>(default)</i> 1-Yes	Drop-down list
DK	Work on the building envelope	0-No <i>(default)</i> 1-Yes	Drop-down list
DL	Other action to improve performance	Specify whether there have been other actions to improve energy performance.	Text
DM	Do you have a CPE (France only)	0-No 1-Yes	Drop-down list
DN	Energy performance certificate (EPC)	Select the EPC from the drop-down list (if applicable).	Drop-down list
DO	Year EPC established	Year EPC was obtained.	Year
DP	GHG performance certificate	Select the GHG (greenhouse gas) performance class from the drop-down list (if applicable).	Drop-down list
DQ	Year GHG certificate established	Year GHG performance class was obtained.	Year



BPE-specific data



10. RESILIENCE DATA

DS	Type of facade	(Details in the Appendix) 0-Light color 1-Dark color 2-Green facade (vegetation) 3-Glass facade 4-Other	Drop-down list
DT	Type of material used for facade	(Details in the Appendix) 0-Wood 1-Concrete 2-Compressed earth 3-Stone 4-Brick 5-Metal cladding 6-Glass façade 7-Other	Drop-down list
DU	Glazed openings	(Details in the Appendix) 0-Not applicable 1-Simple glazing 2-Double glazing (classic) 3-High selectivity double glazing	Drop-down list
DV	Window-to-wall ratio	(Details in the Appendix) Enter a number between 0 and 1.	0-1
DW	Presence of external sun protection	(Details in the Appendix) 0-No 1-Yes	Drop-down list

Ref	Heading	Description	Format
		2-Not applicable	
DX	Type of insulation	0-No insulation 1-From inside 2-From outside	Drop-down list
DY	Airtightness	(Details in the Appendix) 0-Low 1-Medium 2-High	Drop-down list
DZ	Type of roof	(Details in the Appendix) 0-Light color 1-Dark color 2-Green roof (vegetation) 3-Photovoltaic panels 4-Other	Drop-down list
EA	Type of ventilation	(Details in the Appendix) 0-Natural ventilation (manual opening) 1-Natural ventilation (motorised opening) 2-Single flow mechanical ventilation or adjustable mechanical ventilation 3-Double flow mechanical ventilation	Drop-down list
EB	Free-cooling capacity	0-No 1-Yes	Drop-down list
EC	Presence of basement	0-No 1-Yes	Drop-down list
ED	Presence of sensitive equipment in the basement	(Details in the Appendix) 0-No 1-Yes	Drop-down list
EE	Sensitive equipment protection	(Details in the Appendix) 0-No 1-Yes 2-Not applicable	Drop-down list
EF	Artificialised outdoor area	(Details in the Appendix) Indicate the surface area if applicable.	m ²
EG	Type of artificialised surface	(Details in the Appendix) 0-Light color 1-Dark color 2-Semi-waterproofed 3-Other	Drop-down list
EH	Surface area of outdoor green spaces on non-porous surfaces	(Details in the Appendix) Indicate the surface area if applicable.	m ²
EI	Vegetation used in green spaces on non-porous surfaces	(Details in the Appendix) 0-Grass or flowerbed 1-Spontaneous vegetation 2-Three vegetation strata	Drop-down list
EJ	Type of management of green spaces on non-porous surfaces	(Details in the Appendix) 0-Standard management <i>(default)</i> 1-Ecological management	Drop-down list
EK	Surface area of outdoor green spaces in open ground	(Details in the Appendix) Indicate the surface area if applicable.	m ²

Ref	Heading	Description	Format
EL	Vegetation used in green spaces in open ground	(Details in the Appendix) 0-Grass or flowerbed 1-Spontaneous vegetation 2-Three vegetation strata 3-Three vegetation strata remaining from the existing	Drop-down list
EM	Type of management of green spaces in the open ground	(Details in the Appendix) 0-Standard management <i>(default)</i> 1-Ecological management	Drop-down list
EN	Type of foundations	(Details in the Appendix) 0-Shallow foundations (e.g. mat) 1-Deep foundations (e.g. pier)	Drop-down list
EO	Crawl space	(Details in the Appendix) 0-No 1-Yes	Drop-down list



Bat-ADAPT-specific data



11. ADDITIONAL DATA

EQ	Comments	Other comments or remarks.	Text
----	----------	----------------------------	------

BUILDING TYPES

The table below details the building types and sub-types selected by the OID after consultation with experts and market players. This table can also be consulted in tab **1_Building_types** of the data collection file.

0	Offices	
0.1	Standard offices	Offices that are neither high-technical-functionality nor high-end luxury offices.
0.2	High-technical-functionality offices	Offices that meet "international standards". Newly built or restructured building. A high-technical-functionality office can accommodate special technical equipment and meets the criteria of today's demand for optimised workspaces. Historically, these offices have met at least 8 of the following 10 criteria: good adaptation to the office function, flexibility of floors, minimum of 2 phone connections, fibre optics, technical rooms per floor, IT security, reception at the main entrance, video surveillance, electronic badges at the reception, remote surveillance. Note: an air-conditioned building is considered to have high technical functionality in this nomenclature.
0.3	High-end luxury offices	A category of iconic sites, linked to the company's image. This site is distinguished from a standard office by the importance of the services dedicated to the individual and by the predominance of commercial representation (at least 30% of the surface area is occupied by the Front Office function), and by the size of its common and reception areas (reception hall, meeting rooms, management offices, auditorium, etc.). Example: Head office.
0.4	Other	Office building not falling into any of the other categories.
1	Commerce	
1.1	Retail park	An open-air site consisting of a group of independent buildings housing commercial activities (includes street malls).
1.2	Shopping Centre (excluding retail parks)	A collection of shops connected by covered common areas.
1.3	Food supermarket	A single, standalone building dedicated to the retail sale of food products.
1.4	Large specialised store	A single, standalone building dedicated to specialised retailing: household goods, personal goods, leisure, DIY, etc.
1.5	Wholesale	A single, standalone building dedicated to wholesale.
1.6	Not in list (other than High street)	Other types of commercial building (e.g. small food retailers not listed as food supermarkets).
2	Residential	
2.1	Single family housing	Single family houses (including allotment/housing development).

2.2	Collective housing	Collective housing in blocks of flats or residences (excluding hotels and hostels). Specify if it is social housing in box G ("Building type – Member").
3	Mixed	
3.1	Mixed - High-street retail + Offices	Duplicate the line and indicate in box G ("Building type - Member") whether it is the retail part or the office/residential part. Enter the consumption of each part on the corresponding line.
3.2	Mixed - High-street retail + Residential	
3.3	Mixed – Other	-
4	Logistics	
4.1	Storage at room temperature	Logistics warehouses: minimum surface area of 5000 m².
4.2	Storage from +1 to +8°C	
4.3	Storage at <0°C	
4.4	Mixed	When only part of the surface is to be used for cool storage, enter the cooled surface in box AN.
5	Light industrial	
-	Not applicable	Light industrial premises differ from logistics warehouses by their smaller surface area (300 - 10 000 m²) and their location (closer to urban areas).
6	Health	
6.1	Public or private hospitals	University-affiliated hospitals, regional hospitals, specialised hospitals, private clinics, acute care...
6.2	Social health-care institution	A social health-care institution is a structure whose purpose is to receive and support, on its premises or on an outpatient basis, for a short or long period, disabled, dependent or socially excluded persons (for elderly people, see 6.3 below).
6.3	Retirement home	Multi-residence housing facility intended <u>for the elderly</u> .
6.4	Other	Health centre, laboratory of medical biology. Attention: pharmacies must be declared in category 1.6, 3.1 or 3.2.
7	Accommodation	
7.1	1/2 star hotels	The hotel category (no. of stars) determines the room sizes and service levels expected.
7.2	3/4 star hotels	
7.3	5 star hotels and palaces	
7.4	Hotels (unspecified category)	Hotels whose category is unknown or not specified by the contributor
7.5	Other	Other accommodation (student residence, etc.)
8	Education	
-	Not applicable	-

9	Food service	
-	Not applicable	-
10	Other	
-	Not applicable	Any building that does not fall into any of the categories listed above. In this case, specify the type of building in box G ("Type of building - Member").

APPENDIX: A GUIDE TO RESILIENCE DATA ENTRY

TYPE OF FACADE

Facade types are classed into five categories on Bat-ADAPT:

- **Light color:** white or very light, because halftone facades can accumulate heat.
- **Dark color**
- **Green facade (vegetation)**
- **Glass facade**
- **Other**



Figure 1. Light color



Figure 2. Dark color



Figure 3. Glass facade



Figure 4. Green facade (vegetation)

TYPE OF FACADE MATERIAL

The materials considered are those used for the structure of the building. In the case of multiple materials, choose the main material used on the building's facade. The different materials proposed are:

- **Wood**
- **Concrete**
- **Compressed earth:** generally used in brick form, made from sieved, slightly damp earth that is then pressed to make blocks and left to dry for several weeks.
- **Stone**
- **Brick**
- **Metal cladding**

- **Curtain wall (glass facade)**
- **Other**



Figure 5. Compressed earth brick facade



Figure 6. Clay brick facade

GLAZED OPENINGS

The type of glazing employed has an influence on a building's technical performance. The criteria are:

- **Non applicable**
- **Single glazing**
- **Double glazing (standard)**
- **Selective double glazing**, e.g. double glazing with reinforced insulation

WINDOW-TO-WALL RATIO

This question relates to the proportion of glazed area compared to the entire facade of the building. A building with a totally glass facade will have a glazed surface ratio of 1. Below are some examples of facades and associated ratios.



0



0,2



0,4



0,6



0,8



1

PRESENCE OF EXTERNAL SUN PROTECTION

The solar protections considered in this question are external blinds and sunshades. The possible answers are:

- **Yes**
- **No**
- **Not applicable:** this refers to buildings that do not have windows exposed to the sun in summer

AIRTIGHTNESS

Airtightness describes how the building envelope prevents air leakage. It can be:

- **Low:** $Q_{4Pa-surf} > 1.7 \text{ m}^3/(\text{h.m}^2)$
- **Medium:** $1.2 \text{ m}^3/(\text{h.m}^2) < Q_{4Pa-surf} < 1.7 \text{ m}^3/(\text{h.m}^2)$
- **High:** $Q_{4Pa-surf} < 1.2 \text{ m}^3/(\text{h.m}^2)$

In case of doubt, the field can remain unspecified.

TYPE OF ROOF

The type of building roof comes into three main categories:

- **Light color:** white or very light, because a half-tone roof can accumulate heat.
- **Dark color**
- **Green roof (vegetation)**
- **Photovoltaic panels**
- **Other**



Figure 7. Light color roofs



Figure 8. Dark color roof



Figure 9. Green roof (vegetation)

TYPE OF VENTILATION

The type of ventilation is organised into 4 categories:

- **Natural ventilation (manual opening):** natural ventilation allows cool air to enter a building through the windows
- **Natural ventilation (motorised opening):** Natural ventilation ensured by automated windows or other openings in the building.
- **Single flow mechanical ventilation or adjustable mechanical ventilation:** Single-flow mechanical ventilation is used to renew stale air in a room. However, if the residence is heated, this system rejects part of the building's heat, which is not very energy efficient.
- **Double flow mechanical ventilation:** Double-flow mechanical ventilation rejects stale air and recuperates the heat.

PRESENCE OF SENSITIVE EQUIPMENT IN THE BASEMENT

Equipment considered as sensitive are any equipment necessary for operating the building or for ensuring that user activities can be carried out.

- Fluid control, production, and distribution stations (HVAC equipment)
- Electrical substations that the building relies on
- Data centres

Any equipment necessary for the occupation of the building.

SENSITIVE EQUIPMENT PROTECTION

Presence of devices to protect against flooding of sensitive equipment in the building. A few examples of protective devices against flooding:

- Cofferdams
- Dykes
- Waterproof coatings
- Check valves
- Flood-proofing of electrical equipment

ARTIFICIALISED OUTDOOT AREA

On the cadastral parcel of the building, surface area in m2 that is artificial, in other words not natural or planted soil.

TYPE OF ARTIFICIALISED SURFACE

Three categories of artificial surface are considered in Bat-ADAPT:

- **Light color**
- **Dark color**
- **Semi-waterproof:** ground that is between 50% and 90% waterproofed. Examples are pervious concrete, flagstones and paving planted with grass, and other modular materials. They are used in places like pedestrian areas, car parks and terraces.
- **Other**



Figure 10. Light color surface



Figure 11. Dark color surface



Figure 12. Flagstones planted with grass (semi-waterproof)



Figure 13. Pervious concrete (semi-waterproof)

SURFACE AREA OF OUTDOOT GREEN SPACES ON NON-POROUS SURFACES

On the cadastral parcel of the building, the surface in m2 of green area on slabs.



Figure 14. Green area on slabs

TYPE OF VEGETATION IN GREEN SPACES ON NON-POROUS SURFACES

Three types of vegetation exist:

- **Grass or flowerbed**
- **Spontaneous vegetation:** this means wild grass, which is vegetation that develops with no human intervention.
- **Three vegetation strata:** the three vegetation strata are herbaceous stratum (vegetation under 1m high), shrub stratum (1 to 10 m), and wooded stratum (more than 10 m). The three vegetation strata criterion designates a type of vegetation on the cadastral parcel of the building featuring these three types of vegetation. It may have been planted at the same time as the project or have been preserved when the project was constructed.



Figure 15. Grass or flowerbed



Figure 16. Spontaneous vegetation



Figure 17. Three vegetation strata

TYPE OF MANAGEMENT OF GREEN SPACES ON NON-POROUS SURFACES

Choose between the following two types of management:

- **Standard management:** corresponds to management using power tools and phytosanitary products.
- **Ecological management:** management of green areas that respects the environment and adapts the level of plant care in line with the use of the place and with respect for biodiversity. Examples of ecological management of green areas include limiting the use of power tools and phytosanitary products to a strict minimum, drip irrigation, and conservation grazing. Ecological management also favours local plant species

SURFACE AREA OF OUTDOOR GREEN SPACES IN OPEN GROUND

On the cadastral parcel of the building, the surface in m² of green area on open ground. An area on open ground must fulfil two criteria: it must be permeable and planted and include only the passage of any pipes.



Figure 18. Green spaces in open ground

VEGETATION USED IN GREEN SPACES IN OPEN GROUND

Four types of vegetation exist:

- **Grass or flowerbed**
- **Spontaneous vegetation:** this means wild grass, which is vegetation that develops with no human intervention.
- **Three vegetation strata:** the three vegetation strata are as follows herbaceous stratum (vegetation under 1m high), shrub stratum (1 to 10 m), and wooded stratum (more than 10 m). The three vegetation strata criterion designates a type of vegetation on the cadastral parcel of the building featuring these three types of vegetation. It may have been planted at the same time as the project or have been preserved when the project was constructed.
- **Three vegetation strata remaining from the existing:** the three vegetation strata are herbaceous stratum (vegetation under 1m high), shrub stratum (1 to 10 m), and wooded stratum (more than 10 m). This criterion designates vegetation featuring these three strata that comes from vegetation that existed before the building was constructed.

TYPE OF MANAGEMENT OF GREEN SPACES IN THE OPEN GROUND

Choose between the following two types of management:

- **Standard management:** corresponds to management using power tools and phytosanitary products.
- **Ecological management:** management of green areas that respects the environment and adapts the level of plant care in line with the use of the place and with respect for biodiversity. Examples of ecological management of green areas include limiting the use of power tools and phytosanitary products to a strict minimum, drip irrigation, and conservation grazing. Ecological management also favours local plant species.

TYPE OF FOUNDATIONS

Bat-ADAPT considers two types of foundations:

- **Shallow foundations:** strip or raft footing, individual footing, and sill plates. This mostly concerns the foundations of detached houses or lightweight constructions
- **Deep foundations:** buildings are considered as constructions with deep foundations.



*Figure 19. Shallow foundations
(sill plate)*



*Figure 20. Deep foundations
(pile foundations)*

CRAWL SPACE

A crawl space is an unoccupied space located between the ground and the building's basement. With a crawl space, the basement is elevated by at least 10 cm.