Laboratory Benchmarking Tool: Data Fields

This document lists of all the current Laboratory Benchmarking Tool (LBT) data entry fields, with notes on units of measurement, allowed ranges, available field options, and a copy of the LBT help text, as applicable for each field. Required fields (which must be provided for each building) are shown in green text. Fields appearing in the Operational Practices Module are shown in blue text. The list is intended for use by owners preparing to enter their building data in the LBT.

To streamline data entry, the LBT displays only the fields that are relevant to the selected data type (Embodied Carbon, Energy, or Both). Fields marked as Required are only required for the relevant data type.

Please contact lbt@i2sl.org with any questions on this document or on the LBT.

	Field Name	Units	Allowed Values	Help Text
Basic Info	**Type of Record**	-	In Design or In Construction In Operation	Select the type of building record you are entering. This lets us ask the correct questions about the building.
	Project Phase	-	Pre-Design Schematic Design Design Development Construction Documentation Construction Phase Completion Phase	If the building is in design or construction, please indicate the project phase for which you are providing data.
	Data Types			
	Data Types to be Entered	-	Energy Usage Data Embodied Carbon Data Both	Indicate the type of data you will be entering for this record: energy usage data, embodied carbon data, or both. The applicable data entry tabs will then appear.
	Building Status	-	Real Building Test Data	Indicate whether this a real building or just test data. We want to keep fake buildings out of the peer group dataset!

	Field Name	Units	Allowed Values	Help Text
Building Info	**Facility Name**	-	-	Give your building a name you'll recognize. Note: once created, your facility's name can be edited via the Your Buildings list.
	Organization Name	-	-	Enter the name of the organization that owns or operates the building. This helps us to identify duplicate building entries. As with all optional entries, this can be left blank if needed.
	Year Built	-	1800 - [current year + 5 years]	Year of construction or most recent gut renovation. If project is in design, enter anticipated year of completion. If unknown, please provide an estimate. Nearest decade is OK. Note: earliest year allowed is 1800 and latest is 5 years from today.
	Address	-	-	Start typing the building's address and select from the dropdown menu. All worldwide locations are accepted. Approximate location (e.g. city name only) are also accepted if needed.
	Organization Type	-	Academic: Higher Ed Academic: K-12 Government: Federal Government: State and Local Commercial: Biotech Commercial: Pharmaceutical Commercial: Electronics Commercial: Chemical / Oil & Gas Commercial: Consumer Goods Commercial: Other Commercial: Unknown Healthcare Other Not yet known	Choose the option that most closely matches the type of organization that occupies the building.
	Predominant Lab Use Type	-	R&D: Basic Research R&D: Product Development Process Development / Pilot Plant Manufacturing Teaching Testing / Quality Control Crime Lab / Forensic Other Not yet known Unknown	Choose the option that most closely represents the type of work done in the building's labs.
	Notes	-	-	Use this field to add any notes you'd like to save for this data year.

LCA Data (for Embodied Carbon records only)

Field Name	Units	Allowed Values	Help Text
Project Type			
Project Type	-	New Construction Major Renovation	Select the project type for which you are providing data. At this time we are only collecting LCA data for projects that are new construction (entirely new structures and site preparation) or major renovation (up to 50% of the original structure is being retained).
Do Life Cycle Assessment (LCA) Values Reflect Actual Purchased and Installed Materials?	-	Yes No Don't know	Please indicate whether the reported LCA values correspond to actual purchased materials or design assumptions. If actual materials, select Yes. If design assumptions, select No.
Life Cycle Duration	years	0 - 120	The life cycle duration, or building service life, is often prescribed by the chosen methodology and is commonly 60 years.
Embodied Carbon Intensity (Life Cycle Assessment Results)			
Product Stage, A1-A3	kgCO2e/sq.m	1 - 1,000	Also known as cradle to gate. When calculating this quantity, make sure that the area you divide by is that of the entire assessed project, including any accessory spaces.
Transportation to Construction Site, A4	kgCO2e/sq.m		When calculating this quantity, make sure that the area you divide by is that of the entire assessed project, including any accessory spaces.
Construction Process Stage, A5	kgCO2e/sq.m		When calculating this quantity, make sure that the area you divide by is that of the entire assessed project, including any accessory spaces.
Use, B1-B5	kgCO2e/sq.m		This category includes use, maintenance, repair, replacement, and refurbishment. When calculating this quantity, make sure that the area you divide by is that of the entire assessed project, including any accessory spaces.
End of Life, C1-C4	kgCO2e/sq.m		This category includes deconstruction/demolition, transport to waste processing/disposal, waste processing, and disposal of waste. When calculating this quantity, make sure that the area you divide by is that of the entire assessed project, including any accessory spaces.
Module D	kgCO2e/sq.m	-200 - 0	This category should be a negative value and includes benefits and loads beyond the system boundary such as reuse, recovery, and recycling potential. When calculating this quantity, make sure that the area you divide by is that of the entire assessed project, including any accessory spaces.

	Field Name	Units	Allowed Values	Help Text
LCA Data (for Embodied Carbon records only)	Reductions Pursued			
	Embodied Carbon Reductions Pursued	-	Building Reuse Material Reuse Alternate Structural System Structural Biobased Materials Non-structural Biobased Materials Structural Element Optimization Concrete Mix Optimization Exterior Envelope Optimization Interior Finishes Optimization Other Reductions	Which of these strategies did the project pursue? Select all that apply.

	Field Name	Units	Allowed Values	Help Text
Structural Information (for Embodied Carbon records only)	Vibration Criteria	-	No Requirement 32,000 MIPS (Workshop – per ISO) 16,000 MIPS (Office – per ISO) 8,000 MIPS (Residential Day – per ISO) 4,000 MIPS (Op. Theater – per ISO) VC-A; 2,000 MIPS (microscopes) VC-B; 1,000 MIPS (inspection and lithography) VC-C; 500 MIPS (electron microscopes, inspection, lithography) VC-D; 250 MIPS (demanding equipment) VC-E; 125 MIPS (most demanding and sensitive systems) NIST-A; 125 MIPS (metrology and nanotechnology) Less than 125 MIPS (difficult to achieve in most instances)	Select the vibration criterion that most closely matches the requirement for this building. Leave blank if unknown.
	Floor to Floor Height in feet	**ft**, m	**8 - 20**, 2.4 - 6.1	Use average of laboratory floors, if the floors have differing heights.

	Field Name	Units	Allowed Values	Help Text
Structural Information (for Embodied Carbon records only)	Building Density	**lb/ft^3**, kg/m^3	**0 - 50**, 0 - 800	This is the total weight in **pounds**/kg of the building Substructure, Shell- Superstructure, and Shell-Exterior Enclosure, divided by gross building volume (Building Footprint x Height) in **cubic feet**/cubic meters. Notes: the Tally software calculates and provides the material weight in the PDF report and also in the Excel report it generates as the 'Sum of Mass Total'. The OneClick software allows export of material mass by picking export options under a detail mass diagram by viewing results of the baseline or proposed carbon quantity. Allowed values: 0 to 800 kg/m3.
	Seismic Site Class	**-**	A,B,C,D,E,F	Classification of the site for seismic design based on its soil and engineering properties. Typically found in the general notes of the structural engineer's project documents.
	Seismic Design Category	-	A,B,C,D,E,F	Categorization of required seismic design based on risk category and site location. Typically found in the general notes of the structural engineer's project documents.
	Ultimate Wind Speed	**mph**, kph	**0 - 300**, 0 - 482	Ultimate wind speed used for ultimate wind design based on location. Typically found in the general notes of the structural engineer's project documents.

	Field Name	Units	Allowed Values	Help Text
Lab Area	**Number of (Lab) Buildings**	#	1-100	This is normally 1. If you are entering data for a group of buildings together (not typical), enter number of buildings in group.
	Gross Floor Area	**sf**, sq.m.	**500-7000000**; 50-650000	Include total floor area of building (aka gross square footage) but exclude area of open spaces such as parking garages, guard shacks, etc. Note: minimum allowed value is **500 sf**/50 sq.m.
	Gross Floor Area of Accessory Space	**sf**, sq.m.	**1-1000000**; 0.1-93000	Gross area of accessory spaces such as garages, storage or other that are included as part of the assessment.
	Net Floor Area	**sf**, sq.m.	**500-7000000**; 50-650000 (and < gross area)	Net assignable space only, i.e., excludes circulation spaces, restrooms, utility spaces, mechanical rooms etc. This is an optional field. Net area must be less than gross area. Note: minimum allowed value is **500 sf**/50 sq.m.
	Total Lab Area	**sf**, sq.m.	**500-7000000**; 50-650000 (and < gross area)	The LBT considers lab area to consist of those spaces in which experiments take place and where special ventilation conditions (such as single-pass air) or other special conditions (such as tight temperature control and high air recirculation rates) are required. This definition is intended to include open labs and support spaces such as equipment rooms, procedure rooms, vivarium holding rooms, etc. It also includes physics labs, maker spaces, and cleanrooms, which may include recirculated air. It does not include language labs, computer labs, office space, utility space, or other non-lab spaces. Total lab area must be less than total building area and net assignable building area and it is normally less than 50% of the total gross area of a lab building. If the lab area has not yet been designed, please enter an estimate. Note: minimum allowed value is **500 sf**/50 sq.m.
	Component Lab Areas			
	Biology	**sf**, sq.m.	Total equal to total lab area	Biological labs are used for biology and life sciences, including medical research. They may have fume hoods and biosafety cabinets. They also tend to have thermal environments (e.g., cold rooms, warm rooms) and equipment rooms.
	Chemistry	**sf**, sq.m.		Chemistry labs are used for organic, inorganic, physical and analytical chemistry. They are typically fume hood intensive.
	Physics / Engineering	**sf**, sq.m.		Physics/engineering labs are typically "dry" labs. They tend to have high plug loads and may include clean spaces, laser tables, etc.
	Vivarium	**sf**, sq.m.		Vivarium spaces are used for animal housing. Animal procedure rooms and vivarium support spaces should be included in vivarium area.
	Maker / Workshop Area	**sf**, sq.m.		Maker/workshop spaces are typically not highly controlled environments but may include machine shops and industrial art spaces.
	Other	**sf**, sq.m.		Use this for types of lab space not covered by any of the above categories. Also use this category if the lab space has not yet been designed and it is not yet known what type of labs will occupy the building.

	Field Name	Units	Allowed Values	Help Text
Lab Area	Specialty Lab Types			
	Biosafety Laboratory (BSL3/BSL4) Area	**sf**, sq.m.	Area < total lab area	The total area of BSL3/BSL4 areas in the building. Please also include this area in the total lab areas by type above.
	Cleanroom (ISO5 / Class 100) Area	**sf**, sq.m.	Area < total lab area	The total area of ISO 5 / Class 100 clean rooms in the building. Please also include this area in the total lab areas by type above.
	Cleanroom (ISO6 / Class 1000) Area	**sf**, sq.m.	Area < total lab area	The total area of ISO 6 / Class 1000 clean rooms in the building. Please also include this area in the total lab areas by type above.
	Cleanroom (ISO7 / Class 10000) Area	**sf**, sq.m.	Area < total lab area	The total area of ISO 7 / Class 10000 clean rooms in the building. Please also include this area in the total lab areas by type above.
	Number of ULT Freezers	#	0-1000	Enter total number of ultra-low temperature (-80C) freezers here. ULT freezers may be in freezer farms or in lab spaces. Tool accepts values up to 1000.
	Major Imaging Equipment (MRIs, PETs)	-	Yes, No	Indicate whether the building includes major imaging equipment such as MRIs and PETs.

	Field Name	Units	Allowed Values	Help Text
Building Systems (for Energy records only)	**Occupied Hours per Week**	hrs/wk	1-168	The total number of hours per week that the building is occupied at normal levels (do not include occasional overnight use in this total).
	Total Number of Occupants	#	0-10000	The total number of occupants present during normal operations.
	Predominant HVAC System Type	-	Constant Volume with Reheat Variable Volume with Reheat Dedicated Outdoor Air System with Chilled Beams Dedicated Outdoor Air System with Fan Coil Units Displacement ventilation Dual-duct Constant Volume Dual-duct Variable Volume Multi-zone Other Unknown	Select the best match to the HVAC system type serving the building's lab spaces.
	Predominant HVAC Control Type	-	Pneumatic Direct Digital Control Mixture of Pneumatic and DDC Other Unknown	Select the best match to the HVAC control system type serving the building's lab spaces.
	Predominant Cooling System Type	-	District cooling / CHW from Campus Central Plant Chiller Plant in Building: Air Cooled Chiller Plant in Building: Water Cooled DX Cooling Other Unknown	Select the best match to the cooling system serving the building's lab spaces.
	Predominant Heating System Type	-	Boiler plant in building: Condensing HW Boilers Boiler plant in building: Non-Condensing HW Boilers Boiler plant in building: Steam Boilers Heat Pump Heating District Heating / HW or Steam from Campus Central Plant Other Unknown	Select the best match to the heating system serving the building's lab spaces.

	Field Name	Units	Allowed Values	Help Text
Building Systems (for Energy records only)	Exhaust Air Energy Recovery	-	None Glycol Run-Around High-Performance Glycol Run-Around Enthalpy Wheel or Plate Heat Pipe Other Unknown	Select the best match for the type of exhaust air energy recovery system (if any) serving the building's lab spaces.
	Building-Level CHP?	-	Cogen (electricity and heating) Trigen (electricity, heating, and cooling) Other None Unknown	Indicate whether building is equipped with an on-site combined heat and power system. Do not include campus central plants in this answer.
	Geothermal Heat Pump?	-	Yes, No	Indicate whether building is served by geothermal (ground-source) heat pumps.
	Heat Recovery Chiller?	-	Yes, No	Indicate whether the building is equipped with a heat recovery chiller providing chilled water and hot water.
	Data Center kW	kW	0-10000	If the building has a significant data center electrical load, enter approximate load here.

	Field Name	Units	Allowed Values	Help Text
Building Systems (for Energy records only)	Fume Hoods and Ventilation Rates			
	Number of Ducted Fume Hoods	#	0-1000	Total number of ducted fume hoods in the facility. Ducted fume hoods are connected to the building exhaust system.
	Number of Filtering Fume Hoods	#	0-1000	Filtering fume hoods contain fans and filters to extract chemical contaminants from hood air. This count does not include biosafety cabinets.
	Total Linear ft of Fume Hoods	**ft**, m	**0-10000**; 0-3000	The total length of fume hoods (ducted and filtering) in the building.
	Fume Hood Operating Sash Height	**in**, cm	**6-30**; 15-75	Predominant design sash height for fume hoods in the building. Note: tool accepts values between 6 and 30 in.
	Fume Hood Face Velocity	**fpm**, m/s	**20-200**; 0.1-1.0	Design hood face velocity under occupied conditions. Normally between **60 and 100 fpm**/0.3 and 0.5 m/s. Tool accepts values between **20 and 200 fpm**/0.1 and 1.0 m/s.
	Predominant Fume Hood Control Type	-	Constant Volume Variable Volume Other Unknown	Choose the option that most closely matches the predominant fume hood control type in the building.
	Automatic Sash Closers	-	Yes, No	Select Y if ANY automatic sash closers are in use at this building. If not, please select N. Leave blank only if you do not know the answer.
	Hood Face Velocity Setback	-	Yes, No	Select Y if ANY hoods in the building are equipped with occupancy-based hood face velocity setback controls. If not, please select N. Leave blank only if you do not know the answer.
	Filtering Fume Hoods	-	Yes, No	Select Y if ANY filtering fume hoods are in use in the building. If not, please select N. Leave blank only if you do not know the answer.
	High-Performance Hoods	-	Yes, No	Select Y if ANY hoods in the building are high-performance hoods (operating at 80 fpm or lower). If not, please select N.
	Lab Ventilation Management Program (LVMP) in Place	-	Yes No No, but an LVMP is in development Unknown	Is a lab ventilation management program (LVMP) in place at this building? If so, select Y. If not, please select N (or In Development, if applicable). Leave blank only if you do not know the answer.
	Laboratory Occupied Minimum Air Change Rate	ACH	0.1-50	The predominant minimum ventilation rate assigned to occupied labs in the building. Normally determined in coordination with EH&S department. Tool accepts values between 0.1 and 50 ACH.
	Laboratory Unoccupied Minimum Air Change Rate	ACH	0.1-50	The predominant minimum ventilation rate assigned to unoccupied labs in the building. Normally determined in coordination with EH&S. Tool accepts values between 0.1 and 50 ACH.
	Source of Lab Minimum Ventilation Rates	-	Organizational Policy Building Code Requirements Used Hazard Assessment Driven By Fume Hoods Other Unknown	How were lab minimum ventilation rates assigned at this building. Please choose the option that matches the predominant method used for this building.

	Field Name	Units	Allowed Values	Help Text
Building Systems (for Energy records only)	Building Controls Features			
	Supply Air Temperature Reset	-	Yes, No	Supply air temperature reset (demand or outside temperature based) for air handling systems serving labs.
	Static Pressure Reset - Supply Air	-	Yes, No	Demand-based duct static pressure setpoint reset controls for supply air handling systems serving labs.
	Static Pressure Reset - Exhaust Air	-	Yes, No	Demand-based duct static pressure setpoint reset controls for exhaust air handling systems serving labs.
	Unoccupied Airflow Setback in Labs	-	Yes, No	Reduced minimum airflow setpoints for lab spaces during unoccupied periods. May include an occupancy override via sensor or override button. If present, select Y; if not present, please select N. Leave blank only if you do not know the answer.
	Unoccupied Temp Setback in Labs	-	Yes, No	Widened room temperature deadband for lab spaces during unoccupied periods. May include an occupancy override via sensor or override button. If present, select Y; if not present, please select N. Leave blank only if you do not know the answer.
	Pump Head Reset	-	Yes, No	Demand-based reset of hydronic loop differential pressure setpoint.
	Exhaust Fan - Wind Speed Response	-	Yes, No	Reset of minimum exhaust stack velocity based on actual (live) measured wind conditions.
	Chemical Sensing and Airflow Response in Labs	-	Yes, No	Reset of lab minimum airflow rates based on actual (live) measured air quality.
	Other Design Features			
	Low Pressure Drop Design - Air Side	-	Yes, No	-
	Low Pressure Drop Design - Water Side	-	Yes, No	-
	Exhaust Dispersion Analysis Used	-	Yes, No	Select Y if an exhaust dispersion analysis (wind tunnel or CFD) was used to set exhaust fan control parameters. If not, please select N. Leave blank only if you do not know the answer.
	True VAV Exhaust (No Bypass Air)	-	Yes, No	-
	High-Efficiency ULT Freezers	-	Yes, No	Indicate whether the majority of ULT (-80C) freezers in the buildings are of high-efficiency (e.g. ENERGY STAR certified) type.
	Cascade Air Use	-	Yes, No	-
	Water-Cooled Lab Equipment	-	Yes, No	-
	Cooling Plant Capacity	**tons**, kW	**0-1000000**; 0-3500000	Total cooling capacity (in tons) of any cooling plant equipment (chillers and any DX rooftop AHUs) installed in the building.
	Installed Lighting W/sf in Labs	**W/sf**, W/sq.m.	**0.1-10**; 1-110	Average lighting power density (in watts per sf) of lighting installed in lab spaces in the building. Often available from code compliance forms and/or lighting design documentation; may also be estimated based on installed fixtures.

	Field Name	Units	Allowed Values	Help Text
Policies (for Energy records only)	**Building Energy Manager**	-	Yes, No	Does this building have an energy manager? If so, please select Y. If not, please select N. Leave blank only if you do not know the answer.
	Building Energy Efficiency Policy/Targets	-	Yes, No	Does this building have an energy efficiency and/or sustainability policy with specific goals and targets? If so, please select Y. If not, please select N. Leave blank only if you do not know the answer.
	Automatic Fault Detection and Diagnostics	-	Yes, No	Examples: SkySpark, Clockworks. If part of the program, please select Y. If not, please select N. Leave blank only if you do not know the answer.
	Three Biggest Barriers to Efficiency	-	Can't interrupt research Lack of funding Safety concerns Lack of information on options Staff bandwidth Building not high priority Already very efficient Labs won't be used long-term Other Unknown	What are the 3 biggest barriers to increased efficiency/sustainability at this building? Please select 3 options (in any order) from the list provided.
	Occupant Engagement			
	Active Occupant Engagement (Green Labs) Program	-	Yes, in most labs at the building (>75%) Yes, in some labs in the building (25-75%) Yes, but not widespread (<25%) No Unknown	Is an occupant engagement (green labs) program active at this building?
	If yes, please indicate which of the following occupant program components are in place:			
	Fume Hood Sash Management	-	Yes, No	If part of program, select Y. If not, please select N. Leave blank only if you do not know the answer.
	Switching Off Unused Lab Equipment	-	Yes, No	If part of program, select Y. If not, please select N. Leave blank only if you do not know the answer.
	Resource Sharing	-	Yes, No	Example: freezer sharing. If part of program, select Y. If not, please select N. Leave blank only if you do not know the answer.
	Procurement of Energy-Efficient Lab Equipment	-	Yes, No	Example: ENERGY STAR ULT freezers. If part of program, select Y. If not, please select N. Leave blank only if you do not know the answer.
	Recycling / Landfill Diversion	-	Yes, No	If part of program, select Y. If not, please select N. Leave blank only if you do not know the answer.
	Green Chemistry	-	Yes, No	If part of program, select Y. If not, please select N. Leave blank only if you do not know the answer.

	Field Name	Units	Allowed Values	Help Text
Utility & Emissions (for Energy records only)	Utility Usage and Cost			
	Data Year	-	2000-current year	Enter year for which utility data was gathered (tool accepts 2000 or later). Year should be same for all fuels. Note: for buildings that are 'In Design or In Construction,' this field will be prepopulated with the project phase.
	End Month	-	January-December	Select the month in which the data year ends. This is usually December, but may be another month if energy reporting is done on a fiscal year basis at your organization. Note: for buildings that are 'In Design of In Construction,' users do not need to change the default end month.
	All Electric	-	Yes, No	Indicate whether your building is all-electric. This lets us know that the absence of other energy usage was not an oversight.
	Annual Imported Electricity	kWh	Warning issued if calculated Site EUI is outside of the range 20-3000 kBtu/sf/yr (60-9500 kWh/sq.m./yr)	Must also indicate whether each value is measured (directly metered) or estimated (e.g. metering allocations where one meter serves multiple buildings).
	Annual Natural Gas	therms, MMBtu, ccf, kWh, m^3		
	Annual Fuel Oil	gal, MMBtu, kWh		
	Annual Other Fuel	MMBtu, kWh		
	Annual District Chilled Water	ton-hours, MMBtu, kWh		
	Annual District Hot Water	MMBtu, kWh		
	Annual District Steam	klbs, MMBtu, kWh		
	Annual Total Energy Cost	-	-	Total annual cost of above utilities (in selected currency).
	Currency	-	-	Please pick currency for cost entries. Note: Exchange Rates with USD were updated on September 1, 2022.
	Water Usage	gal, ccf, m^3	-	Total potable water usage. Includes cooling tower water use where present.
	Annual Water Cost	-	-	Total water + sewer cost (in selected currency).

	Field Name	Units	Allowed Values	Help Text
Utility & Emissions (for Energy records only)	Operational Emissions Data			
	Custom Chilled Water Emissions Factor	kgCO2e/kBtu, kgCO2e/kWh, lbCO2e/kBtu, lbCO2e/ton-h	-	Enter a custom district chilled water emissions factor if applicable. If no value is entered, the LBT will use the Energy Star factor of 0.0527 kgCO2e/kBtu, scaled by the local grid emissions factor divided by the national average grid emissions factor.
	Custom Steam Emissions Factor	kgCO2e/kBtu, kgCO2e/kWh, lbCO2e/kBtu	-	Enter a custom district steam emissions factor if applicable. If no value is entered, the LBT will use the Energy Star factor of 0.0644 kgCO2e/kBtu.
	Custom Hot Water Emissions Factor	kgCO2e/kBtu, kgCO2e/kWh, lbCO2e/kBtu	-	Enter a custom district hot water emissions factor if applicable. If no value is entered, the LBT will use the Energy Star factor of 0.0644 kgCO2e/kBtu.
	Custom Other Fuel Emissions Factor	kgCO2e/kBtu, kgCO2e/kWh, lbCO2e/kBtu	-	Enter a custom emissions factor for Other Fuel if applicable. If no value is entered, the LBT will use the Energy Star factor of 0.0741 kgCO2e/kBtu.
	Emissions Factor for Electricity from Cogeneration	kgCO2e/kBtu, kgCO2e/kWh, lbCO2e/kBtu, lbCO2e/kWh	-	This field is intended for use where some or all of the building's electricity comes from a central cogeneration plant. Please enter the applicable emissions factor for electricity generated by the cogen system, using the WRI's recommended calculation protocol for cogeneration systems if possible. If no value is entered, the local electrical grid intensity will be used.
	Annual Electricity From Central Plant Cogen	kWh	-	Enter the amount of electricity consumed by this building that came from a central cogeneration facility. The emissions factor entered above will be used for the portion of the electricity consumption. IMPORTANT NOTE: this quantity should also be included in the total Imported Electricity value entered above.
	Were custom factors calculated using WRI Protocols?	-	Yes, No	Please indicate whether the WRI GHG Protocol methods (e.g. the Efficiency Method for cogeneration systems) were used to calculate custom emissions factors entered above.
	Custom Electric Grid Region (US)	-	All US grid regions	For US building only, if the automatic grid region lookup did not return the correct grid, please select the correct grid region from this list.
	Custom Electric Grid Intensity	kgCO2e/kBtu, kgCO2e/kWh, lbCO2e/kBtu, lbCO2e/kWh	-	For any building, if the electric grid intensity lookup did not return the correct value, please enter the correct value here.
	Laboratory Process Emissions	kgCO2e, MTCO2e, lbCO2e	-	Please enter the annual amount of any GHG emissions from laboratory processes not covered by the utility emissions entered above. This value will not affect your Operational Emissions score, but is being collected for research into the types of emissions to include in future versions of the Score.
	Type of Laboratory Process Emissions	-	-	Provide a brief description of the types of any process emissions entered above.
	Fugitive Emissions	kgCO2e, MTCO2e, lbCO2e	-	Enter the annual amount of fugitive emissions from refrigerant usage. This value will not affect your Operational Emissions score, but is being collected for research into the types of emissions to include in future versions of the Score.
	Electricity used for Electric Vehicle Charging	kWh	-	Enter the annual electricity used for electric vehicle charging, if this was included in the total imported electricity value entered above. If not, do not enter a value here.

	Field Name	Units	Allowed Values	Help Text
Utility & Emissions (for Energy records only)	Renewable Energy Generation at Building	-	Solar PV Wind Turbine None Other or Multiple Types	Please indicate whether the building is equipped with any on-site renewable energy generation. Do not include campus-wide or off-site renewables.
	Do any renewable energy credits or carbon offsets apply to this building?	-	Yes No Don't know	Please indicate whether the owner of this building uses any market-based instruments to abate carbon emissions. These include renewable energy credits, energy attribute certificates, green tariffs, power purchase agreements, and carbon offsets. If unknown, please select 'Don't know.'
	Annual Onsite Renewables (RECs owned)	kWh, MWh	-	Enter the amount of electricity generated by onsite renewable sources and consumed on site, for which the facility has retained ownership of the Renewable Energy Credits. This should only include renewables that reduce electric consumption recorded by the electric meter for the building. This amount should not be included in the Imported Electricity value entered above.
	Annual Onsite Renewables (RECs not owned)	kWh, MWh	-	Enter the amount of electricity generated by onsite renewable sources and consumed on site, for which the facility has **NOT** retained ownership of the Renewable Energy Credits. This should only include renewables that reduce electric consumption recorded by the electric meter for the building. This amount should not be included in the Imported Electricity value entered above.
	Offsite Green Power (RECs, PPAs, EACs, etc.)	kWh, MWh	-	Enter the total amount of offsite green power assigned to this building. These can consist of unbundled Renewable Energy Credits, Energy Attribute Certificates, (virtual) Power Purchase Agreements, Green Tariffs, and other market-based instruments. While these may be purchased at a portfolio level, users should apportion them to buildings for the purpose of LBT data entry.
	Carbon Offsets	kgCO2e, MTCO2e	-	Enter the amount of carbon offsets allocated to this building. While these may be purchased at a portfolio level, users should apportion them to buildings for the purpose of LBT data entry.

	Field Name	Units	Allowed Values	Help Text
Utility & Emissions (for Energy records only)	System-Level Energy Usage and Related Data			
	Overall Peak Electric Demand	kW	-	Maximum annual electrical demand. If data is available for multiple intervals, use 15-minute interval.
	Process/Plug Annual Electric Usage	kWh	-	Electricity consumed by equipment plugged into electrical outlets (plus any other process equipment that consumes electricity) in the building. Data normally only available if end-use electrical submeters are installed.
	Ventilation System Annual Elec Usage	kWh	-	Electricity consumed by ventilation equipment (i.e., fans) in the building. Data normally only available if end-use electrical submeters are installed.
	Cooling Plant Annual Electric Usage	kWh	-	Electricity consumed by cooling plant equipment (chillers, pumps, cooling tower fans) in the building. Include energy consumed by AHU DX cooling systems if applicable and available. Data normally only available if end-use electrical submeters are installed.
	Lighting Annual Electric Energy Usage	kWh	-	Electricity consumed by lighting systems in the building. Data normally only available if end-use electrical submeters are installed.
	Process/Plug Peak Electric Demand	kW	-	Peak electric demand of equipment plugged into electrical outlets (plus any other process equipment that consumes electricity) in the building. Data normally only available if end-use electrical submeters are installed.
	Ventilation System Peak Electrical Demand	kW	-	Peak electric demand of ventilation equipment (i.e., fans) in the building. Data normally only available if end-use electrical submeters are installed.
	Cooling Plant Peak Electric Demand	kW	-	Peak electric demand of cooling plant equipment (chillers, pumps, cooling tower fans, and AHU DX cooling systems if applicable) in the building. Data normally only available if end-use electrical submeters are installed.
	Lighting Peak Electric Demand	kW	-	Peak electric demand from lighting systems in the building. Data normally only available if end-use electrical submeters are installed.
	Building Peak Airflow	**cfm**, m^3/h	-	Peak total building ventilation (outside) airflow, including air delivered to both lab and non-lab areas.
	Peak Cooling Load	**tons**, kW	-	Peak cooling load (measured in tons) from the building. This may be available from chiller plant historical data, or may be estimated based on experience with the building systems.