Enterprise green communities

2020 Green Communities Criteria (5.1b ERI Template V1.1)

INSTRUCTIONS:

5.1b Building Performance Standard *(Mandatory)*
If following the ERI Option of this criterion, use this template to demonstrate compliance. Complete one template per project. Please complete all yellow fields.

For your Prebuild submission, complete this worksheet's Overview tab and Prebuild tab. Then, submit this worksheet online in the certification portal along with the preliminary energy modeling report(s) provided by your project's energy modeler. You'll also transfer the projected EUI and Emissions information for your project that has been calculated below into the text field in the portal.
For Postbuild, update this worksheet's Overview tab and complete the Postbuild tab. Then, submit this worksheet online in the certification portal along with the confirmed energy modeling report(s), and, transfer the projected EUI and Emissions information for your project into the portal.
The Prebuild iteration of this form should reflect projected, intended, performance of the property after construction is complete. The Postbuild iteration of this form should reflect the as-built condition of the property once construction is complete.

OPTIONAL CRITERIA:

5.2a Moving to Zero Energy: Additional Reductions in Energy Use: If applicable, this template will automatically calculate the number of points for a project complying with this optional criterion. This calculation is based on the weighted average of square footage of unit types and their associated ERI (i.e. the more square footage of a unit type, the more the associated ERI will be weighted in the calculation). ***The project team is responsible for transferring calculated result (in grey) into the appropriate fields in the certification portal, if pursuing this optional criterion.***

5.3b Moving to Zero Energy: Renewable Energy: If applicable, this template will automatically calculate the percentage of renewable energy for Criterion 5.3b. Completing this template will provide project teams with the number of points they may be eligible for, either for Option 1 and Option 2. ***The project team is responsible for selecting which option they will be pursuing and transferring the calculated result into the appropriate field in the certification portal, if choosing to comply with this optional criterion.***

Note that for projects with multiple buildings, described by more than one of the point pathways in the chart below (single-story buildings and/or 2-3 stories and/or 4+ stories), the building with the most stories will be used to determine how many points the project will be eligible. This template will calculate the percentage of total project energy consumption provided by renewable energy, and the building with the most stories.

Colored Cell Key:
- Green cells: Instructions
- Yellow cells: Data input fields
- Grey cells: Data output fields (transfer outputs to portal)

Project Information	
Project Name	
Date	
Applicant Organization	
Contact Name	
Phone	
Email	

Project Location	PREBUILD	POSTBUILD
Street Address		
City		
State	N/A	
Zip Code		
Common Space (sf)	0	
Residential Space (f)	0	0
Total Conditioned Floor Area (sf)	0	0

Energy Information		
State or Local Energy Code		
Climate Zone		
Criterion 5.5b: Apart from emergency backup power, no combustion equipment used as part of the building project; the project is all-electric.		
Criterion 5.2a: Points achieved	N/A	N/A
Energy Use Intensity (EUI) Information		
Total Conditioned Floor Area ***Excluding*** 5.3b Renewable Energy (kBtu/sf)	N/A	N/A
Total Conditioned Floor Area ***Including*** 5.3b Renewable Energy (kBtu/sf)	N/A	N/A
Emissions Information - National		
Total Residential and Common Space ***Excluding*** 5.3b Renewable Energy (tCO2e)	0	0
Total Residential and Common Space ***Including*** 5.3b Renewable Energy (tCO2e)	0	0
Annual Emissions Information - NYC Overlay		
Inputs for NYC LL97 Carbon Emissions Calculator		
Building Inputs: Building Type	One or two family dwelling - R-3, all others R-2,	
Building Inputs: Area (SF)	0	0
Utility Inputs: Electricity ***Excluding*** *5.3b Renewable Energy (kWh)*	0	0
Utility Inputs: Electricity ***Including*** *5.3b Renewable Energy (kWh)*	0	0
Utility Inputs: Natural Gas (therms)	0	0
Utility Inputs: Fuel Oil 2 (gallons)	0	0
Total Residential and Common Space ***Excluding*** 5.3b (tCO2e)		
Total Residential and Common Space ***Including*** 5.3b (tCO2e)		
Renewable Energy Information (only complete this section if complying to optional criterion, 5.3b Renewable Energy)		
Criterion 5.3b: Annual renewable energy purchase or production (kWh)		
Criterion 5.3b, Option 1: Building with the most stories	0	
Criterion 5.3b, Option 1: Percentage of renewable energy for total project	0%	0%
Criterion 5.3b, Option 2: Percentage of renewable energy for common space	0%	0%

transfer to certification portal

transfer to certification portal

NYC OVERLAY ONLY: Input results from NYC LL97 Calculator and transfer to certification portal

To determine climate zone, please click on this box to visit the 2018 International Energy Conservation Code website. The code contains a list of all counties by state and corresponding climate zone.

Emissions information is based on zipcode-specific data found on the EPA Power Profiler website: https://www.epa.gov/energy/power-profiler#/. This template utilizes the 2018 data.

For all NYC Overlay projects, use the NYC LL97 Carbon Emissions Calculator to calculate emissions information and record results in this spreadsheet. Link to calculator here: **https://www.be-exchange.org/calculator/**. For projects that include Moving to Zero Energy: Renewable Energy, calculate results twice, excluding and including renewable energy. *Disclaimer: the results calculated using the NYC LL97 Carbon Emissions Calculator are for informational purposes only and does not document compliance or lack of compliance with NYC LL97.*

Use Tables 5.3b, Option 1 and 5.3b, Option 2 for projects with buildings that are described by more than one of the point pathways.
The building with the most stories will determine the points that a project will be eligible for.

Table: 5.3b, Option 1 (Percentage of Total Project Energy Consumption Provided by Renewable Energy)

	10%	25%	40%	55%	70%
Single-story/single-family	0 points	0 points	4 points	6 points	8 points
2–3 stories	0 points	4 points	6 points	8 points	8 points
4 stories or more multifamily	4 points	6 points	8 points	8 points	8 points

Table: 5.3b, Option 2 (Percentage of Common Area Meter Energy Consumption Provided by Renewable Energy)

	60%	70%	80%	90%	100%
Any multifamily project	1 point	2 points	3 points	4 points	5 points

PLEASE ENTER IN ALL BUILDINGS, EVEN BUILDINGS WITH NO COMMON SPACE. Common Space Energy Calculations. This template only estimates the energy use of common spaces by using energy modeling information from low-rise and mid-rise ENERGY STAR prototype buildings. It is for informational purposes only. Complete a row for each building in the project.

Building Name	Number of Stories	Common Space Conditioned Floor Area	Prebuild Annual Common Space Electricity Usage (kWh)	Prebuild Annual Common Space Natural Gas Usage (therms)	Postbuild Annual Common Space Electricity Usage (kWh)	Postbuild Annual Common Space Natural Gas Usage (therms)
			0	0	0	0
			0	0	0	0
			0	0	0	0
			0	0	0	0
			0	0	0	0
			0	0	0	0
			0	0	0	0

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Instructions:

Complete the table below to reflect the performance of every dwelling unit in the project. For projects that are not using sampling, create a row in the table with information for each and every dwelling unit in the project.

Or, in lieu of submitting HERS documentation for every dwelling unit in a given development, project teams may choose to verify compliance with Criterion 5.1a through a sampling protocol aligned with RESNET guidance. Complete the table below to reflect the performance of every dwelling unit in the project, although sampling guidance will be used to determine which units are modeled and/or tested. The person submitting this form attests that all information is complete and accurate, and that all project units meet or exceed the assumptions of the dwelling units representing the worst-case configuration of each unique unit type.

Note that per the **RESNET Sampling Guidelines** (www.resnet.us/professional/standards), Floor plans with the same number of bedrooms, same number of bathrooms, same conditioned floor area (+/- 10%) can be considered the same unit type.

And, note that per the RESNET Guidelines for Multifamily Energy Ratings (www.resnet.us/professional/standards), An evaluation must be performed using the various exposures, orientations and levels within the building to determine the configurations that results in the highest HERS Index for that unit type. Mid-level, interior configurations, which typically have a higher HERS Index, may be excluded from this evaluation. The projected rating with the highest HERS Index for that unit type must then be used to represent all sampled units of that same unit type, regardless of actual exposure, orientation, or level in the building.

Required HERS Index scores:
For each dwelling unit in the project, achieve a HERS score of 80 or less. Any method or strategy, except for on-site power generation, may be implemented to satisfy the targeted minimum energy performance.

Exception: Each dwelling unit of the following is eligible to achieve a HERS score of 100 or less rather than 80 or less:
- Substantial rehabs of buildings built before 1980 with walls made only of brick/masonry
- Moderate rehabs of buildings built before 1980

Unique Unit Types in Project*

Unit Name	Type Description	WORST CASE CONFIG: Square Footage of Unit Type	WORST CASE CONFIG: Total Annual Electricity Usage (kWh)	WORST CASE CONFIG: Total Annual Natural Gas Usage (therms)	WORST CASE CONFIG: Total Annual Propane Gas Usage (gallons)	WORST CASE CONFIG: Total Annual Heating Oil Usage (gallons)	Unit Type Meets 5.1b ERI Exception	WORST CASE CONFIG: HERS Index score of Unit Type	5.1b Maximum HERS Index score	Total Number of Dwelling Units per Unit Type	Total Square Footage of Unit Type	Total Electricity Usage (kWh)	Total Natural Gas Usage (therms)	Total Annual Propane Usage (gallons)	Total Annual Heating Oil Usage (gallons)	5.2a Points	Unit EUI (kBtu/sf)	Unit Type Weight	Weighted Electricity per SF	Weighted Natural Gas
Sample: Type A	Sample: 1 bed/1 bath						No		80		0	0	0	0	0	80	0	#DIV/0!	0	0
							No		80		0	0	0	0	0	80	0	#DIV/0!	0	0
							No		80		0	0	0	0	0	80	0	#DIV/0!	0	0
							No		80		0	0	0	0	0	80	0	#DIV/0!	0	0
							No		80		0	0	0	0	0	80	0	#DIV/0!	0	0
							No		80		0	0	0	0	0	80	0	#DIV/0!	0	0
							No		80		0	0	0	0	0	80	0	#DIV/0!	0	0

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Instructions:

Complete the table below to reflect the performance of every dwelling unit in the project. For projects that are not using sampling, create a row in the table with information for each and every dwelling unit in the project. ***If every dwelling unit is entered in the table below, the ERI Path - Postbuild Addresses tab does not need to be completed.***

Or, in lieu of submitting HERS documentation for every dwelling unit in a given development, project teams may choose to verify compliance with Criterion 5.1a through a sampling protocol aligned with RESNET guidance. Complete the table below to reflect the performance of every dwelling unit in the project, although sampling guidance will be used to determine which units are modeled and/or tested. ***If sampling protocol is used, the ERI Path - Postbuild Addresses must be completed.*** The person submitting this form attests that all information is complete and accurate, and that all project units meet or exceed the assumptions of the dwelling units representing the worst-case configuration of each unique unit type.

Note that per the **RESNET Sampling Guidelines** (www.resnet.us/professional/standards), Floor plans with the same number of bedrooms, same number of bathrooms, same conditioned floor area (+/- 10%) can be considered the same unit type.

And, note that per the RESNET Guidelines for Multifamily Energy Ratings (www.resnet.us/professional/standards), An evaluation must be performed using the various exposures, orientations and levels within the building to determine the configurations that results in the highest HERS Index for that unit type. Mid-level, interior configurations, which typically have a higher HERS Index, may be excluded from this evaluation. The projected rating with the highest HERS Index for that unit type must then be used to represent all sampled units of that same unit type, regardless of actual exposure, orientation, or level in the building.

Required HERS Index scores:
For each dwelling unit in the project, achieve a HERS score of 80 or less. Any method or strategy, except for on-site power generation, may be implemented to satisfy the targeted minimum energy performance.

Exception: Each dwelling unit of the following is eligible to achieve a HERS score of 100 or less rather than 80 or less:
- Substantial rehabs of buildings built before 1980 with walls made only of brick/masonry
- Moderate rehabs of buildings built before 1980

Unique Unit Types in Project*

Unit Name	Type Description	POSTBUILD WORST CASE CONFIG: Square Footage of Unit Type	POSTBUILD WORST CASE CONFIG: Total Annual Electricity Usage (kWh)	POSTBUILD WORST CASE CONFIG: Total Annual Natural Gas Usage (therms)	POSTBUILD WORST CASE CONFIG: Total Annual Propane Gas Usage (gallons)	POSTBUILD WORST CASE CONFIG: Total Annual Heating Oil Usage (gallons)	PREBUILD: HERS Index score of worst-case configuration of Unit Type	POSTBUILD: HERS Index score of worst-case configuration of Unit Type	Reference Home HERS Index score of Unit Type	Total Number of Dwelling Units per Unit Type	Total Square Footage of Unit Type	Total Electricity Usage (kWh)	Total Natural Gas Usage (therms)	Total Annual Propane Gas Usage (gallons)	Total Annual Heating Oil Usage (gallons)	5.2a Points	Unit EUI (kBtu/sf)	Unit Type Weight	Weighted Electricity	Weighted Natural Gas
Sample: Type A	Sample: 1 bed/1 bath								80		0	0	0	0	0	80	0	#DIV/0!	0	0
									80		0	0	0	0	0	80	0	#DIV/0!	0	0
									80		0	0	0	0	0	80	0	#DIV/0!	0	0
									80		0	0	0	0	0	80	0	#DIV/0!	0	0
									80		0	0	0	0	0	80	0	#DIV/0!	0	0
									80		0	0	0	0	0	80	0	#DIV/0!	0	0
									80		0	0	0	0	0	80	0	#DIV/0!	0	0

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Instructions:

If sampling protocol is used, this tab must be completed. List all dwelling unit addresses in the project and select the corresponding unit type for each dwelling unit. The unit types will be prepopulated with the unit types listed in the table on the ERI Path - Postbuild tab.

The person submitting this form attests that all information is complete and accurate, and that all project units meet or exceed the assumptions of the dwelling units representing the worst-case configuration of each unique unit type. ***If every dwelling unit is entered in the table on ERI Path - Postbuild, this tab does not need to be completed.***

Dwelling Unit Address	Unit Type	Dwelling Unit Tested?