# NGBS GREEN CERTIFICATION

Net Zero Energy Certification Options for Green Certified Affordable Housing



#### Overview

The three most recognized green building programs for green affordable housing – NGBS Green, Enterprise Green Communities, and LEED – all offer "built-in" net zero energy recognitions for buildings that are certified through their respective programs.

NGBS Green+ NET ZERO ENERGY, LEED Zero Energy, and Enterprise Green



Communities Plus each offer a streamlined pathway for green certified buildings to achieve additional recognition through the third-party program of their choice. Whenever an affordable housing program includes green building criteria and seeks to incorporate additional criteria for net zero energy compliance, we recommend that all these options be included to offer developers choice among credible and rigorous third-party green building certification programs.

Developers should be aware that each program features distinct compliance requirements and cost structures. NGBS Green+ NET ZERO ENERGY certification offers a flexible and affordable solution for net zero energy construction that is issued at the same time as green certification and does not require post-occupancy benchmarking or recertification.

View examples of NGBS Green certified buildings that have earned the +NET ZERO ENERGY certification at <u>www.HomeInnovation.com/NGBSGreenResources</u>.



## COMPARISON OF NET ZERO ENERGY CERTIFICATIONS AVAILABLE THROUGH GREEN BUILDING PROGRAMS

#### CERTIFICATION



**LEED** Zero



OVERVIEW	Recognition of net zero energy construction based on energy modeling.	Recognition that building has achieved a source energy balance of zero over a 12-month period.	Recognition that building is "near zero" or zero energy performance as determined by one of the energy efficiency certification programs listed below.
COMPLIANCE METHOD	Energy Modeling	Post-occupancy Energy Benchmarking	Participation in programs like DOE ZERH, PHIUS, International Living Future Institute, and Living Building Challenge
	Building must demonstrate it is constructed or renovated to be net zero energy. Certification is based on as-built conditions when construction is complete; no post-occupancy benchmarking is required. Submit energy performance reports demonstrating energy performance with - and without - renewable energy generation or procurement, and information about energy	Earn LEED certification, either BD+C or O+M. Submit 12 months of post- occupancy operating data to GBCI for review when net zero source energy balance is achieved [Source Energy Balance = Total Energy Delivered – Total Non-Renewable Energy Displaced]. ENERGY STAR Portfolio Manager must be used to calculate source energy for the project. Re-submit operating data	Earn 2020 Enterprise Green Communities certification for New Construction or Substantial/ Moderate Rehab. Two compliance options: 1. "Moving to Zero Energy" – certify under a program that requires advanced levels of building envelope performance, such as DOE ZERH, PHI, or PHIUS. 2. "Achieving Zero Energy" – certify to DOE ZERH or PHI Plus and install or procure renewable energy to offer the same amount or more than the energy that the
	Information about energy efficient features and renewable energy systems.	every 3 years to maintain certification.	or more than the energy that the project is modeled to consume OR certify to a program that requires zero energy

performance, such as PHIUS+ Source Energy, PHI Plus, PHI Premium, ILFI's Zero Energy Petal, Zero Carbon Petal, or Living Building Challenge

In select climate zones, additional dehumidification requirements may apply.

## COMPARISON OF NET ZERO ENERGY CERTIFICATIONS AVAILABLE THROUGH GREEN BUILDING PROGRAMS

COST	\$50-300 per building, depending on type and size.	\$1,500-3,000 per building, depending on square footage and member status.	No additional fee for Enterprise Plus certification; however, additional program fees and significant time may be required for compliance with the energy programs listed above.
BEST FOR	New construction or existing buildings pursuing NGBS Green certification and planning to do energy modeling.	Projects that have already earned LEED BD+C or O+M certification/Projects that may have already planned to do Portfolio Manager benchmarking for financing requirements.	New construction and renovation projects pursuing both Enterprise Green Communities certification and one of the listed programs above.
ADVANTAGES	<ul> <li>Most flexible and affordable</li> <li>Recognition issued at construction completion</li> <li>Streamlined recognition from a single organization</li> </ul>	Based on operational data	Additional marketing benefit through dual-certifications with outside energy efficiency programs
LEARN MORE	www.HomeInnovation.com/ NGBSGreenPlus	www.usgbc.org/programs/ leed-zero	www.greencommunitiesonline.org