

Green Building Incentive Policy Proposed 2020 Update



Department of Environmental Services
Office of Sustainability and Env. Management

September 2020

Green Building Policy - Background

- For site plan projects
- Encourage reduced environmental impact
 - Energy efficiency
- Voluntary
- Bonus Density

- Initial proposal – your feedback is critical

History of Green Building Incentive Policy

- First adopted in 2000
 - Incentive for LEED Silver only, commercial office only
- Update in 2003
 - Included all LEED levels and all site plan projects
- Update in 2009
 - Adjusted bonus to reflect market transformation
- Update in 2012
 - Focus on energy efficiency to align with Community Energy Plan goals
- Update in 2014
 - Energy performance, Arlington specific
- Update in 2020
 - Address updated Community Energy Plan goals (energy performance, renewables, Zero Carbon), other County priorities (equity, biophilia)

Community Energy Plan 2019

- Sets goal of becoming carbon neutral by 2050
- Community to achieve 100% renewable electricity by 2035
- New buildings need to be 50% more efficient than code as soon as possible – *this is our collective challenge*
- Government operations to achieve 100% renewable electricity by 2025
- Consider energy equity during implementation

Current Green Building Policy: LEED *Plus*

	FAR			
Current Policy (2014)	.25	.35	.50	>.55
	LEED Silver Plus:	LEED Gold Plus:	LEED Platinum Plus:	LEED Gold Plus: • NZ or ZC
	<ul style="list-style-type: none"> • Energy Performance – Energy Star (required for office) • Energy Star appliances • Water Sense fixtures • 10 years of energy reporting • Plus 0.05 FAR for Arlington Priorities • 15% energy efficiency (encouraged) • Financial Security (75% LEED/25% Energy Star) 			

Proposed Draft Outline: 2020 Update

	FAR			
2020 (proposed)	.25	.35	.50	.60
	<ul style="list-style-type: none"> • Baseline Prereqs <ul style="list-style-type: none"> • LEED Gold • EE measures • Rooftop solar • EV charging • Equity • Energy Performance <ul style="list-style-type: none"> • Energy Star Score 80 	<ul style="list-style-type: none"> • Baseline Prereqs <ul style="list-style-type: none"> • LEED Gold • EE measures • Rooftop solar • EV charging • Equity • Energy Performance <ul style="list-style-type: none"> • Energy Star Score 85 • 3 <i>Extra</i> items <ul style="list-style-type: none"> • Choose from 8 options (EE, solar, affordable housing) 	<ul style="list-style-type: none"> • Baseline Prereqs <ul style="list-style-type: none"> • LEED Gold • EE measures • Rooftop solar • EV charging • Equity • Energy Performance <ul style="list-style-type: none"> • Energy Star Score 90 • 4 <i>Extra</i> items <ul style="list-style-type: none"> • Choose from 8 options (EE, solar, affordable housing) 	<p>Same at 0.50 Plus:</p> <ul style="list-style-type: none"> • NZE or ZC

Existing
baseline
prereqs with
proposed
adjustments

- Green Building Certification*
 - LEED version 4 or 4.1 BD&C for office/hotel
 - Residential LEED version 4 or 4.1 or Earthcraft Gold
- Energy Star appliances*
 - add Energy Star dryers
- Water Sense Fixtures
- Energy Star post-occupancy certification*
 - All eligible building types
- Automated benchmarking*
- Financial security*
 - change to 50% LEED/50% Energy Star

* *adjustment from existing*

New Proposed Baseline Prerequisites

Energy

- LEED v 4.1 Energy Optimization credit – 3 EE points
- Energy Use Intensity (EUI) design target
- All LED lights
- Continuous exterior insulation (not including balcony edges)
- Wall Mock-up (English and Spanish)
- Central ventilation testing
- Refrigerant leakage reporting (and/or BAS alarm?)
- Electric vehicles charging – 2% parking spaces
- Solar 2W/sf of roof area (~16% of roof area)

Sustainability

- Narrative on human interaction with nature (biophilia)
- Bird-friendly glass (floors 1-3)
- Dark sky (no uplighting)
- Equity criteria

Proposed “Extra” Items

- Three (3) additional LEED version 4.1 energy optimization points
- Whole building air leakage testing or envelope commissioning
- Advanced energy metering LEED credit (office only)
- Building life cycle impact reduction LEED credit
- Grid harmonization LEED credit
- Solar – 4W/sf of roof area
- Electric heating for hot water and ventilation (e.g., heat pump) (multi-family only)
- Affordable housing LEED credit
- Others?

Automatic UPDATE

- 2 ½ years after program adoption
- Two additional energy points under LEED 4.1 EA Credit: Optimize Energy Performance
- Electrification of building systems (except back-up generation and cooking) – waiting for SWA report
- 10% improvement in EUI design target based on use type

Biophilia Narrative (draft)

Proposed guidance:

Outline how the project optimizes energy efficiency and environmental conservation in the community and enhances existing and/or creates new natural spaces for occupants and the public to interact with nature and creates habitat for people, plants and wildlife. Components to be evaluated include (but are not limited to):

- How design features provide spaces for building occupants and the public to interact with nature at the ground level or as part of the building (indoor gardens, green walls, atria, balconies, roof amenity space, etc.)
- Linkages to existing natural resources and adjoining open space (physical or visual connections)
- Paths, seating and areas for outdoor activity
- Views from the building and the site to adjacent sites
- Views from adjacent buildings/sites to the site
- Solar access and shading
- Native plant gardens
- Tree canopy
- Access to water
- Access to sky
- Hearing nature sounds inside and outside the building
- Heat island mitigation
- Air quality impacts (indoor – low VOC materials, minimize natural gas combustion; and outdoor – bike parking, EV charging)

Bird-Friendly Glass (draft)

- Considering two compliance options
 - Prescriptive – Bird-friendly glass up to 36 feet
 - Performance – Bird-friendly façade (weighted average of all façade materials – LEED credit)
- Considering alignment with other County goals (transparency of ground floor retail)

Community Engagement Process At the *Involve* Level

Time	Stakeholders	Communications Strategy
May – mid-July 2020	County department discussions	CPHD Planning, CPHD Housing, AED,
Late June – early July	DES leadership	DES leadership
July	County leadership	CAO, CMO
July - Sept	Public	Post on website; receive comments online; staff reviews comments and addresses changes;
August - Sept	E2C2, Energy Committee; Economic Development Commission; Long Range Planning Committee; Park and Rec Commission; Urban Forestry Commission; NAIOP; Chamber of Commerce	Present at commission meetings; collect comments
Late Sept - November 2020	CMO and CAO CB 2x2s November	Prepare final draft of GB Incentive Policy County reviews
December 2020	Planning Commission and County Board	Final Green Building Incentive Policy to Planning Commission and County Board

Near-term next steps:

- Post on website for comments
- Continue to meet with stakeholders
- Draft final proposed policy based on input from stakeholders

Discussion

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Proposed Energy Use Intensity (EUI)

Building Type	Baseline Average	EUI Design Target	Future EUI Design Target
	EUI	EUI	EUI
Multi-Family	50	40	31
Office	33	33	25
Data Center	1564	1331	1097
Lodging - Large	81	69	57
Mixed Retail	160	131	101
Restaurant	334	266	198
Grocery/food sales	196	167	138
Retail	57	47	37
Services (salon, cleaner, etc)	55	43	31

Equity

Goal

Support personnel best practices that embed and infuse equity, diversity, and inclusion into the fabric and culture of the building design and construction workplace in Arlington.

Criteria

At least one member of the design and construction team shall be employed by an organization with a racial and ethnic diversity, equity, and inclusion program within its management operations. Specifically, the firm's program shall include:

- Staff training plan that reflects the firm's understanding of structural racism and its intersection with the building industry.
- Professional development opportunities and data-driven policies used to identify and invest in staff diversity among leadership levels.
- Strategies in place to ensure racial and ethnic inclusion at all levels of the organization, including the Board of Directors level.

Documentation

Include a description of how the firm implements and institutionalizes diversity through policy, management philosophy and training. Describe how the firm, on a day-to-day basis, fosters a work environment that is inclusive and conducive to diverse staff. Include copies of personnel and other relevant policies, training provided to staff, description of the general management philosophy as it relates to diversity.