# SUSTAINABLE DEVELOPMENT POLICY

November 2023



AvalonBay recognizes that the communities we design, develop, and operate have a significant impact on the environment – and our environment is rapidly changing. Buildings are responsible for approximately 40% of global greenhouse gas emissions (GHGs)<sup>1</sup> and AvalonBay is committed to reducing our impact to curb the wide-ranging effects of climate change. To that end, in 2018 AvalonBay was the first publicly traded multifamily REIT to set Science Based Targets (SBTs)<sup>2</sup> to align our 2030 scope 1, 2, and 3 reduction targets with the Paris Accord.

Our initial Building Certified policy was originally released in 2016 and revised in 2021 to include climate risk. This new version provides additional granularity and clarity around the expectations for new development projects as it relates to broad environmental goals and green building certifications. As AvalonBay continues to evolve our thinking in this area, we will update this policy accordingly.

## **Building Certified**

Certification of our sustainable development practices is an important part of our governance structure that provides third party validation of AvalonBay's efforts. Aligning our development practices to best-in-class certifications, such as the U.S. Green Building Council's LEED rating systems, helps ensure that our design and development standards continue to evolve and progress as building codes and regulations change across our national footprint.

## Requirements for New Development Projects:

The below Certification and Documentation section outlines LEED certification and internal documentation requirements. The Design and Construction section lists mandatory measures (except under Energy Efficiency – optional for Garden buildings) that will improve environmental performance while contributing to the required LEED certification. A template LEED scorecard can be found appended to the back of this policy (Appendix B) outlining a suggested path to LEED Gold. All below requirements are in line with current practice or design standards in most regions. All Design & Construction requirements are applicable regardless of certification path.

For the purposes of this policy, please see the below definitions:

- Mid- & High-Rise Buildings = Four or more stories above grade
- Garden Buildings = Up to three stories above grade

### *Certifications and Documentation:*

- Achieve LEED certification at a minimum of the Gold Level for all Mid-rise and High-rise buildings using the LEED BD+C: Multifamily Mid-Rise v4 rating system.
- LEED certification using the LEED BD+C: Homes and Multifamily Low-Rise v4 rating system is encouraged but not mandatory for Garden buildings (i.e., stacked flats, townhomes, and direct entry product). If not pursuing LEED certification, Garden projects are encouraged to pursue

<sup>&</sup>lt;sup>1</sup> https://architecture2030.org/why-the-building-sector/

<sup>&</sup>lt;sup>2</sup> https://sciencebasedtargets.org/companies-taking-action

- other 3<sup>rd</sup> party certifications such as NGBS, Passive House, Zero Energy Ready Homes, or Energy Star.
- All Mid and High-rise projects will include in the MIC package for MIC Class 2 approval a draft LEED scorecard showing the pathway to LEED Gold. Any request for deviation or exception to this standard will require review from the VP, Construction Support Services, SVP Design, and VP, ESG prior to submission for MIC Class 2 approval.

### Design & Construction Requirements:

## • Energy Efficiency

- Garden Buildings: Projects are encouraged (but not required) to comply with all
  mandatory measures of ENERGY STAR for Homes version 3, achieve a HERS Index rating
  that meets or exceeds the ENERGY STAR HERS Index Target, install ENERGY STAR
  qualified appliances, and ensure all duct runs are fully ducted (i.e., no plenum air
  spaces).
- Mid-Rise and High-Rise Buildings: Projects are required to comply with the requirements
  of ASHRAE Standard 90.1-2016. Design should comply with the mandatory provisions,
  and prescriptive provisions of Sections 5-10, as applicable. Where local code is more
  stringent than 90.1-2016, the local code will have primacy.

### Electrification

All new developments submitting for Class 3 MIC approval starting January 1, 2026 will
prioritize electrification in apartment units (excluding common & amenity spaces) to
reduce scope 1 emissions. After January 1, 2026, the use of onsite gas in apartment
units will need to be approved by the MIC.

#### • Embodied Carbon Emissions Reduction

Track embodied carbon using a Life Cycle Assessment as outlined in the <u>Embodied</u>
 <u>Carbon Tracking Policy</u>. Future versions of this policy will outline embodied carbon
 reduction targets from structure, foundation, enclosure, and gypsum products.

#### Renewable Energy

- Assess new development projects for onsite solar and battery storage as outlined in the Solar Design Policy
- Additionally, if onsite solar generation is not pursued during initial development, teams should partner with the ESG team to investigate whether community solar programs exist for inclusion during lease-up.

### • Water Reduction

- All new developments must reduce indoor potable water use through use of fixtures and appliances that meet the current construction standards listed in Appendix A.
- All new developments must reduce outdoor water use by minimizing overall irrigation demand and optimizing irrigation systems if they are needed. All irrigation will be sub metered separately from the whole building water meter. Please see the current construction standards in Appendix A for more detail on these requirements.

#### Construction Waste

 All projects are to reduce the total construction waste sent to landfills/incinerators by diverting 75% of the waste generated. Weight tickets must be collected from the waste haulers to confirm the diversion rate.

#### EV Charging

 Install EV chargers and infrastructure for future electric vehicle charging stations consistent with the EV design standards.

## <u>Certification Completion</u>

- Upon certification, projects pursuing LEED are encouraged to purchase and display LEED door decals to raise awareness of the building's certification. To purchase door decals or other LEED display items, visit Green Plaque and enter the projects USGBC/LEED Project ID Number.
- <u>Coming soon</u>: In early 2024, all projects pursuing certification will be required to complete a new business process in iBEAM called the Green Building Certification Business Process (currently in development). This must be completed at DD, CD, Construction Start and Final Certification.

## **Approved LEED Consultant List**

Mid and high-rise projects pursuing LEED in line with the above are required to use one of the below approved vendors:

Region	Consultant	Contact Information		
California / Colorado	VCA Green	Moe Fakih: mfakih@vca-green.com		
PNW O'Brien 360		Alistair Jackson: Alistair@obrien360.com		
NJ/NY	MaGrann	Tristan Grant: TristanGrant@MaGrann.com		
Northeast / TX / NC	US Ecologic	Matt Houser: Matthew.Houser@us-ecologic.com		
Mid-Atlantic	TBD	TBD		
FL	TBD	TBD		

For projects looking to use a consultant not listed above, prior approval is required from the VP, ESG.

## APPENDIX A – Green Construction Standards & Policies Referenced

## - Energy Efficiency

- Building Commissioning Policy
- o Windows | 08-53-1300-00
- o Electric Metering | 26-00-0000-00
- o Metering & Submetering | 22-05-1900-00
- o Tankless Water Heaters | 22-00-0000-00
- o Tanked Water Heaters | 22-00-0000-00
- Kitchen Exhaust | 23-00-0000-00
- o Bath Exhaust | 23-00-0000-00
- o Apartment Thermostat | 23-00-0000-00
- o Common Area Thermostats | 23-00-0000-00
- o Apartment HVAC | 23-30-0000-00
- o Apartment Light Fixtures | 26-50-0000-00
- o Lighting Controls | 26-00-0000-00
- o Common Corridor and Breezeway Lighting | 26-50-0000-00
- Model Apartment Lighting | 26-50-0000-00
- Site Lighting | 33-70-1330-00
- o Emergency Lighting | 26-50-0000-00
- o Exit Signage | 26-50-0000-00
- o Parking Garage Lighting | 26-50-0000-00
- o Site Lighting | 33-70-1330-00
- o Apartment Ceiling Fan | 26-20-0000-00

### Embodied Carbon

Embodied Carbon Tracking Policy

## Renewable Energy

- Solar Design Policy
- o Solar | 13-63-1300
- o Electric Metering | 26-00-0000-00

### Water

- o Apartment Plumbing Fixtures | 22-41-0000-00
- o Common Area Plumbing Fixtures | 22-41-0000-00
- Metering & Submetering | 22-05-1900-00
- o Irrigation | 32-80-1300-00
- Apartment Appliances | 11-31-1300-00

## Occupancy and Material Health & Transparency

- No Smoking Policy
- o Bike Rack | 12-93-1300-00
- Bike Repair Stand | 12-93-1300-00
- Wood Look Vinyl Plank Flooring Apartment | 09-65-0000-00
- o Resilient Flooring Fitness | 09-61-0000
- o Interior Sealant | 07-90-0000-00
- o Exterior Sealant | 07-90-0000-00
- Carpet Apartment | 09-68-1600-00
- o Carpet Common Area | 09-68-1605-00
- Carpet Common Area (Walk-Off) | 09-68-1605-00

- o Paint Exterior | 09-91-1300-00
- o Paint Common Area Interior | 09-91-2300-00
- o Paint Apartment Interiors | 09-91-2300-00

# EV Charging

Electric Car Charging Station Infrastructure | 26-00-0000-00

## Waste

- o Garden Trash Center | 11-82-0000-00
- o Garden Trash Center | 13-30-1300
- o Mid/Highrise Trash Chutes and Compactors | 14-91-8200



# **Template LEED Multifamily Midrise Scorecard**

Yes Maybe			Yes	Maybe	Multifamily Midrise [West Coast] [Suburban] Project			
1 1	Integrativ	ve Process	2	20	6	Energy a	nd Atmosphere	37
1 0	Credit	Integrative Project Team	1	Р		Prereq	Minimum Energy Performance	Required
0 0	Credit	Design Charrette	1	Р		Prereq	Energy Metering	Required
0 1	Credit	Trades Training	1	Р		Prereq	Education of the Homeowner, Tenant, or Bldg Manager	Required
				18	6	Credit	Annual Energy Use	30
8 7	Location	and Transportation	15	12	4		- Energy Model	
Р	Prereq	Floodplain Avoidance	Required	6	2		- Multifamily Home Size Adjuster	
Performance Pat	th			0	0	Credit	Efficient Hot Water Distribution System	5
0 0	Credit	LEED for Neighborhood Development Location	15	2	0	Credit	Advanced Utility Tracking	2
Prescriptive Path	1							
5 3	Credit	Site Selection - TOTAL	8	1.5	2	Materials	s and Resources	9
0 4		- Previously Developed	4	Р		Prereq	Certified Tropical Wood	Required
3 0		- Avoidance of Sensitive Land	3	Р		Prereq	Durability Management	Required
2 0		- Infill Development	2	1	0	Credit	Durability Management Verification	1
0 1		- Open Space	1	0.5	1	Credit	Environmentally Preferable Products	5
0 1		- Street Network	1	0	1	Credit	Construction Waste Management	3
0 1		- Bicycle Storage & Network	1					
2 1	Credit	Compact Development	3	7.5	4.5	Indoor Er	nvironmental Quality	18
1 1	Credit	Community Resources	2	Р		Prereq	Ventilation	Required
0 2	Credit	Access to Transit	2	Р		Prereq	Combustion Venting	Required
				Р		Prereq	Garage Pollutant Protection	Required
2 1	Sustainab	ole Sites	7	Р		Prereq	Radon-Resistant Construction	Required
Р	Prereq	Construction Activity Pollution Prevention	Required	Р		Prereq	Air Filtering	Required
Р	Prereq	No Invasive Plants	Required	Р		Prereq	Environmental Tobacco Smoke	Required
0 1	Credit	Heat Island Reduction	2	Р		Prereq	Compartmentalization	Required
0 0	Credit	Rainwater Management	3	1	2	Credit	Enhanced Ventilation	3
2 0	Credit	Non-Toxic Pest Control	2	0	0.5	Credit	Contaminant Control	2
				3	0	Credit	Balancing of Heating and Cooling Distribution Systems	3
6 4	Water Eff	ficiency	12	0	1	Credit	Enhanced Compartmentalization	3
Р	Prereq	Water Metering		1	1	Credit	Enhanced Combustion Venting	2
Performance Pat	th			0	0	Credit	Enhanced Garage Pollutant Protection	1
0 0	Credit	Total Water Use	12	1.5	0	Credit	Low Emitting Products	3
Prescriptive Path	1			1	0	Credit	No Environmental Tobacco Smoke	1
3 3	Credit	Indoor Water Use	6					
3 1	Credit	Outdoor Water Use	4	3	3	Innovatio	on	6
				Р		Prereq	Preliminary Rating	Required
Total YES: 52	n	rojects will need 60pts to achieve Gold. Ma	vho points	3	2	Credit	Innovation	. 5
Total MAYBE	. 70 5	· ·		0	1	Credit	LEED Accredited Professional	1
	p	rovide flexibility to choose the best path for	r achieving Gold.					
LEED Silver				3	1	Regional	Priority	4
Certified: 40 to 49 poir	nts, Silver: 50 to	59 points, Gold: 60 to 79 points, Platinum: 80 to 110		3	1	Credit	Regional Priority	4
							- '	

Prepared by: O'Brien360



# **Template LEED Multifamily Lowrise Scorecard**

Yes	Мауре			Yes	Maybe	Multii [West Coast] [Subu		amily Lowrise rban] Project	
1	1	Integrativ	ve Process	2	20	8	Energy a	nd Atmosphere	37
1	0	Credit	Integrative Project Team	1	Р		Prereq	Minimum Energy Performance	Required
0	0	Credit	Design Charrette	1	Р		Prereq	Energy Metering	Required
0	1	Credit	Trades Training	1	Р		Prereq	Education of the Homeowner, Tenant, or Bldg Manager	Required
					18	6	Credit	Annual Energy Use	30
8	7	Location	and Transportation	15	0	0	Credit	Efficient Hot Water Distribution System	5
Р		Prereq	Floodplain Avoidance	Required	2	0	Credit	Advanced Utility Tracking	2
Perform	nance Pa	th			0	1	Credit	Active Solar-Ready Design	1
0	0	Credit	LEED for Neighborhood Development Location	15	0	1	Credit	HVAC Start-Up Credentialing	1
Prescrip	otive Patl	ı							
5	3	Credit	Site Selection - TOTAL	8	1.5	2	Material	s and Resources	9
0	4		- Previously Developed	4	Р		Prereq	Certified Tropical Wood	Required
3	0		- Avoidance of Sensitive Land	3	Р		Prereq	Durability Management	Required
2	0		- Infill Development	2	1	0	Credit	Durability Management Verification	1
0	1		- Open Space	1	0.5	1	Credit	Environmentally Preferable Products	5
0	1		- Street Network	1	0	1	Credit	Construction Waste Management	3
0	1		- Bicycle Storage & Network	1	0	0	Credit	Material-Efficient Framing	2
1	2	Credit	Compact Development	3					
1	1	Credit	Community Resources	2	6.5	6.5	Indoor E	nvironmental Quality	18
1	1	Credit	Access to Transit	2	Р		Prereq	Ventilation	Required
					Р		Prereq	Combustion Venting	Required
2	1	Sustainal	ole Sites	7	Р		Prereq	Garage Pollutant Protection	Required
Р		Prereq	Construction Activity Pollution Prevention	Required	Р		Prereq	Radon-Resistant Construction	Required
Р		Prereq	No Invasive Plants	Required	Р		Prereq	Air Filtering	Required
0	1	Credit	Heat Island Reduction	2	Р		Prereq	Environmental Tobacco Smoke	Required
0	0	Credit	Rainwater Management	3	Р		Prereq	Compartmentalization	Required
2	0	Credit	Non-Toxic Pest Control	2	1	2	Credit	Enhanced Ventilation	3
					0	0.5	Credit	Contaminant Control	2
8	2	Water Ef	ficiency	12	3	0	Credit	Balancing of Heating and Cooling Distribution Systems	3
Р		Prereq	Water Metering		0	1	Credit	Enhanced Compartmentalization	3
Perform	nance Pa	th			1	1	Credit	Enhanced Combustion Venting	2
0	0	Credit	Total Water Use	12	0	2	Credit	Enhanced Garage Pollutant Protection	1
Prescrip	otive Patl	1			1.5	0	Credit	Low Emitting Products	3
6		Credit	Indoor Water Use	6					
2	2	Credit	Outdoor Water Use	4	3	3	Innovation	n	6
					Р		Prereq	Preliminary Rating	Required
	YES: 53		rejects will peed Copts to achieve Cald NA	ayba nainta	3	2	Credit	Innovation	5
	MAYBE	טב.ט	rojects will need 60pts to achieve Gold. Ma		0	1	Credit	LEED Accredited Professional	1
LEED	Silver	р	rovide flexibility to choose the best path fo	or achieving Gold.					
					3	1	Regional	Priority	4
Certified:	Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110			3	1	Credit	Regional Priority	4	

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