

LAKWOOD PLANNING COMMISSION STUDY SESSION AGENDA

CIVIC CENTER NORTH
DAT CONFERENCE ROOM
470 S. ALLISON PKWY.
LAKEWOOD, COLORADO

HOSTED VIRTUALLY USING ZOOM

November 17th, 2021

7:00 PM

STUDY SESSION

- A. SUSTAINABLE DEVELOPMENT STANDARDS
- B. GENERAL BUSINESS

This meeting will be conducted using Zoom and the recording will be available after the meeting on the City of Lakewood YouTube account. The public is welcome to view the meeting live stream online at [LakewoodSpeaks.org](https://www.lakewoodspeaks.org). However, opportunities for public participation and comment are available at other events.





MEMORANDUM

TO: Planning Commission

FROM: Caitlin Long, Senior Sustainability Planner, Planning Department
Jonathan Wachtel, Sustainability Manager, Planning Department

DATE: November 9, 2021

SUBJECT: Amendments to Article 13 – Sustainable Development Standards

SUMMARY STATEMENT:

At the November 17, 2021, Planning Commission Study Session, staff will provide a detailed overview of the proposed amendments to Article 13 of the Zoning Ordinance, following the framework laid out and discussed during the October 13 Planning Commission study session. These amendments will build upon the existing sustainable design standards adopted by Planning Commission and City Council with the intent of continuing to advance the community's adopted Sustainability Plan and Comprehensive Plan goals.

A third study session will follow on December 15 to review the draft ordinance language before a proposed public hearing to recommend approval on January 5.

BACKGROUND INFORMATION:

The Enhanced Development Menu (EDM) was adopted in May 2019 as Article 13 of the Zoning Ordinance. The intent and purpose of the EDM was to create a tool to help ensure large-scale developments support Lakewood's adopted Comprehensive Plan and Sustainability Plan goals. The EDM also provides a mechanism in which to pilot emerging technologies, design, and building methods in sustainable development in order to assess elements that may be included in future development and building codes.

Staff presented the current status of the EDM and preliminary ideas for changes and additions to the menu at a study session with the Planning Commission in March 2021, which also included some discussion of the LAC's recommendations for a Renewable Energy Mitigation Program (REMP). Over the last several months, staff has been developing a holistic Sustainable

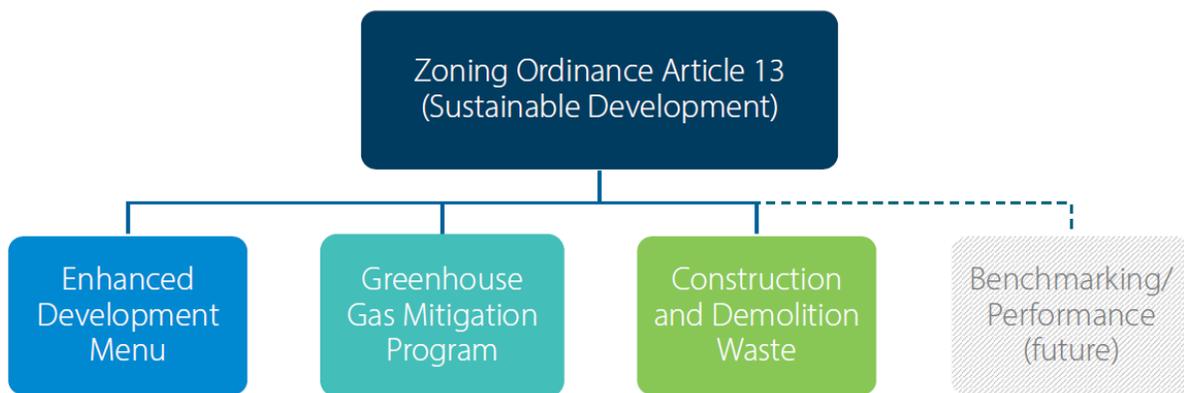
Development program incorporating updates to the EDM, a Greenhouse Gas (GHG) Mitigation Program, and Construction and Demolition (C&D) waste recycling supplemental standards into an expanded Article 13.

The following sections of this memo recap the overall framework and explain the key elements of each component of the proposed Article 13 – Sustainable Development.

OVERARCHING FRAMEWORK:

The framework for the proposed Article 13 – Sustainable Development is based on the premise that sustainability is, by its nature, holistic, and therefore development standards intended to promote sustainability should be holistic as well. To this end, the framework is organized into four sections: the existing Enhanced Development Menu, the new Greenhouse Gas Mitigation Program, the supplemental Construction & Demolition Waste Recycling standards, and the future Benchmarking and Performance Standards, as shown in Figure 1 below:

Figure 1. Sustainable Development Framework



The **Enhanced Development Menu** is designed to be flexible and context-specific, allowing for a wide variety of items to be implemented within a development site that promote city goals. Examples of these items range from energy efficiency and renewable energy sources to local food access and public art.

The **Greenhouse Gas Mitigation Program** complements the EDM and is designed to capture the impact that all developments have on air quality and emissions. These types of impacts cannot be seen and do not stay within the confines of a single property. Mitigation of these impacts is essential for the community to reach its climate goals and commitments.

The **Construction & Demolition Waste Recycling Supplemental Standards** will aid in enforcement of and compliance with the existing recycling requirements adopted in the building code. These standards will support diversion of C&D waste from area landfills, which accounts for approximately 50% of all municipal solid waste in the Denver Metro area.

ENHANCED DEVELOPMENT MENU:

The Enhanced Development Menu (EDM) is what currently exists in Article 13. Proposed updates to the existing EDM include:

- Expanded applicability and more fair point structure that scales based on the size of development, as shown in the Figure 2 comparison tables below.
 - Despite the lower size threshold, single family and duplex development would be exempt. There will be considerations for affordable housing to allow the square footage of affordable units to be excluded from the development size for the purposes of determining how many EDM points are required.
 - A new fee-in-lieu would be offered for required points over 50 at a rate of approximately \$3,000-\$4,000 per point. Final value is still being determined.

Figure 2. EDM Applicability Comparisons

Current Standards		Proposed Standards	
Development Size	Points required	Development Size	Points required
< 20,000 sq ft	None	< 2,500 sq ft	None
20,000 - 50,000 sq ft	35	2,500 – 10,000 sq ft	10
> 50,000 sq ft	50	10,000 – 100,000 sq ft	1 per 1,000* sf
		>100,000 sq ft	100*
* May pay fee-in-lieu for points over 50			

- New items added to the EDM options to allow for greater variety, flexibility, and ability to mitigate greenhouse gas emissions.

Figure 3. EDM Option Comparisons – Proposed new options shown in green

Category	Existing EDM Options	Proposed EDM Options	Potential CO ₂ Reduction
Energy	Outdoor Lighting	Outdoor Lighting	
	Passive Solar	Beneficial Electrification	
	Urban Heat Island		
	Offsite Renewable	Offsite Renewable	
	On-site Renewable	On-site Renewable	
Water & Landscape	Hydro Zones	Hydro Zones	
	Water Budgeting	Water Budgeting	
		Pollinator-Friendly Landscaping Low-Impact Stormwater Design	
Zero Waste	Recycling & Compost Enclosures	Recycling & Compost Enclosures	
	Recycling & Compost Contracts	Recycling & Compost Contracts	
		Deconstruction	
Materials		Urban Heat Island	
		Adaptive Reuse	
		Reclaimed/Recycled Materials	
		Low-Carbon Concrete	
Transportation	Multi-Modal Assessment	Multi-Modal Assessment	
	Bike Amenities	Bike Amenities	
	Car Share	Car Share	
	EV Spaces	Public EV Spaces Above-Code EV Spaces	
	Transit Improvements	Enhanced Connectivity	
Community & Health	Social Amenities	Social Connection Amenities	
	Public Art	Public Art	
		Adaptability / Universal Design	
Other	Food Production	Food Production	
	LEED Gold	LEED and NGBS	
	Open Option	Open Option	

GREENHOUSE GAS MITIGATION PROGRAM:

The new proposed Greenhouse Gas Mitigation Program, which evolved from the Lakewood Advisory Commissions Renewable Energy Mitigation Program (REMP) recommendation to City Council in early 2021, will include:

- Broad applicability to all new construction of single-family and multi-family residential, and non-residential construction, as well as major alterations/additions requiring Major Site Plan review for multi-family and non-residential developments.
 - This would not apply to alterations or additions to existing single-family dwelling units, such as room additions, detached garages, accessory dwelling units, or basement finishes.
- A Performance Standard for greenhouse gas emissions to align new development with the community's climate goals and commitments.
 - The Performance Standard for residential developments is calculated based on the target emissions per person, while the Performance Standard for commercial developments is calculated based on the target emissions per square foot.
- A methodology to calculate 5 years of projected CO₂ equivalent emissions for a proposed development using publicly available and credible data sources. Staff anticipates buildings then joining the planned benchmarking and performance program after year 5 to ensure ongoing efficiency.
 - Residential projected emissions are based on:
 - Energy – annual typical Energy Use Intensity (EUI) per square foot for the type of development being proposed (single-family detached, townhome, multi-family, etc.)
 - Source: Energy Information Administration (EIA) and Xcel utility data from Jefferson County
 - Waste – annual waste emissions per person
 - Source: 2018 Lakewood Greenhouse Gas Inventory
 - Transportation – annual average Vehicle Miles Travelled (VMT) per person for Lakewood
 - Source: DRCOG Travel Model
 - Non-Residential projected emissions are based on:
 - Energy – annual typical Energy Use Intensity (EUI) per square foot for the type of development being proposed (office, restaurant, retail, etc.)
 - Source: Energy Information Administration (EIA) and/or Xcel utility data from Jefferson County
 - Waste – annual waste emissions per square foot
 - Source: 2018 Lakewood Greenhouse Gas Inventory

- Opportunities to mitigate emissions exceeding the Performance Standard, including but not limited to incorporating renewable energy for electricity and space conditioning needs, improving building efficiency, installing electric vehicle charging infrastructure, and providing waste diversion services.
 - Many mitigation opportunities overlap with the Enhanced Development Menu and can count towards both programs, further incentivizing sustainable development.
- A fee-in-lieu of compliance for any emissions above the performance standard that have not been addressed through approved mitigation measures. Fee will be levied at the rate established in state and federal guidance for the Social Cost of Carbon (SCC), but no less than the current SCC rate of \$76 per metric ton of CO₂ equivalent emissions.

CONSTRUCION & DEMOLITION WASTE RECYCLING:

The Construction & Demolition Waste Recycling Supplemental Standards are intended to increase compliance with the existing requirements in the building code. There is no proposed change to the existing standards in the building code, which apply to all demolition projects and all construction projects greater than 2,500 square feet, and require recycling of concrete, asphalt, metal, untreated wood, cardboard, and interior fixtures/salvageable items. The proposed supplemental standards include:

- Ability to collect a deposit on any project required to comply with construction and demolition standards in the building code.
- Requirements for a comprehensive construction waste management plan (CWMP) and ongoing material tracking for projects also requiring review under the EDM. Specific requirements of the CWMP include:
 - Designating a single on-site waste manager
 - Projected types and volumes of waste materials likely generated
 - Identification of haulers and disposal and recycling facilities for all materials hauled from the site
 - On-site planning for waste stream separation,
 - Training plan for employees and subcontractors,
 - Final reporting requirements including material specific waste receipts.
- A deposit to be paid prior to issuance of building or demolition permit in the amount of \$1 per square foot (minimum \$2,500 – maximum \$100,000).
 - Deposits to be refunded in full upon successful compliance with waste management plan and reporting requirements.
 - Deposits to be partially refunded or forfeited for non-compliance with waste management plan or incomplete reporting.

FEE COLLECTION & EXPENDITURE

The fees and deposits collected from these three programs are intended to be used for programs and projects that reduce emissions, promote adaptability to climate change, increase waste diversion, and overall create a sustainable built environment. Staff is working with the Finance department to determine the appropriate method for collecting and utilizing funds collected.

ENGAGEMENT AND OUTREACH:

Task Force and Internal Working Group: As part of developing these amendments to Article 13, staff is regularly engaged with an internal staff working group and a task force consisting of key LAC representatives and community members to ensure the standards would be implementable and consistent with the vision the LAC originally presented for a Renewable Energy Mitigation Program.

Newsletters and Social Media: The overarching framework was shared in the October 2021 edition of the Lakewood Sustainability newsletter, and more components of these sustainable development programs will be shared in future newsletters.

Interactive Project Page: A project page has also been created on Lakewood Together to share progress to date and invite feedback about the amendments before bringing the draft ordinance to Planning Commission, and staff will be offering one-on-one information sessions upon request.

NEXT STEPS:

Following the November 17 study session, staff will draft the proposed amendments for review by the internal working group and the task force.

On December 15, staff will hold an additional study session with the Planning Commission to share the draft ordinance, and a Planning Commission public hearing on the proposed amendments is anticipated to be held on January 5.

City Council will begin to consider this topic with a study session currently scheduled in March, and the amendments could be passed and go into effect in summer or fall of 2022.

Throughout the next several months, the Lakewood Together page will continue to be monitored for additional community feedback to inform the final revisions to the ordinance, prepare for implementation with easy-to-use resource guides and handouts, and provide additional outreach and education on the new standards.

ATTACHMENTS: Background documents from previous study session meetings are available on Lakewood Speaks.