

DOEE Development Review Comments

ZC 19-29: 1348 4th Street NE @ Union Market

DOEE recognizes the applicant's commitment to certify the project at the LEED v4 Gold level and encourages the applicant to pursue environmental and sustainable benefits beyond the LEED rating system. The following recommendations are intended to assist the applicant with incorporating sustainable design and construction strategies that will yield higher LEED scores and minimize the project's impact on the environment.

Many of these strategies can be financed with no upfront cost through [DC PACE](#). The [DC Green Bank](#) and the [DC Sustainable Energy Utility](#) (DCSEU) also offer innovative financial products and technical assistance to help projects gain access to capital. To learn about project-specific financing options, contact Crystal McDonald at cmcdonald1@dcseu.com or complete the [Custom Rebate Form](#).

Energy Performance and Electrification

If the applicant is looking to increase their commitment to sustainability, some of the most significant gains would be in the areas of energy efficiency and maximization of on-site renewable energy, both of which are District priorities. Maximizing energy efficiency at the time of construction will more cost effectively assist in meeting [Building Energy Performance Standards](#) (BEPS) in the future. The BEPS program was established in Title III of the Clean Energy DC Omnibus Act of 2018. The Act states that starting in 2021, owners of buildings over 50,000 square feet that are below a specific energy performance threshold will be required to improve their energy efficiency over the next 5 years. Projects below the performance threshold will be able to choose between a performance pathway, which requires that they document a 20% reduction in energy usage over the 5-year compliance period, or a prescriptive list of required energy efficiency measures. The next BEPS will be established in 2027 and again every six years, and the compliance threshold will increase each cycle. New projects are encouraged to maximize energy efficiency during the initial design and construction in order to meet BEPS upon completion.

In line with the District's goal of carbon neutrality and the objectives of the Sustainable DC 2.0 and Clean Energy DC plans to reduce greenhouse gas emissions, DOEE encourages the applicant to design the building to be fully electric (i.e., eliminate the on-site combustion of fossil fuels). DOEE and DCRA are evaluating options to include building electrification requirements in future code updates. Building electrification involves powering all building appliances and systems (e.g., domestic hot water, heating equipment, cooking equipment) with electricity rather than fossil fuels (e.g., natural gas or fuel oil). Efficient electric systems reduce indoor air pollution caused by combustion equipment and can save on operating costs, especially when coupled with solar energy. All-electric buildings can also save on construction costs by avoiding the need to install gas piping. It's easier and more cost-effective for new construction to be designed with electric systems than it is to retrofit buildings later, so DOEE strongly encourages projects to evaluate electric options as part of their initial energy modeling exercises. For more information about building electrification in the District, visit [this resource page](#) created by the Building Innovation Hub.

DOEE encourages the project to provide electric vehicle (EV) charging stations and install make-ready infrastructure so that additional charging stations can be added at a later date. The [2017 DC Green Construction Code](#) provides some suggested thresholds for the provision of supply equipment and make-ready infrastructure. EV resources and information about available incentives are available at <https://doee.dc.gov/service/electric-vehicles-resources>.

Net-Zero Energy

Clean Energy DC, the District's detailed plan to reduce greenhouse gas emissions, calls for net-zero energy (NZE) building codes by 2026. DOEE encourages the project to explore net-zero energy construction/certification ahead of this planned code requirement. An NZE building is a highly energy-efficient building that generates enough on-site, or procures acceptable offsite, renewable energy to meet or exceed the annual energy consumption of its operations. NZE buildings can benefit both owners and tenants through significantly lower operating costs, improved occupant comfort and improved indoor air quality. Under the [2017 District of Columbia Energy Conservation Code](#), projects can use Appendix Z as an alternative compliance pathway, which provides a working definition and guidance for NZE.

DOEE has published a *Net-Zero Energy Project Guide* and a *Multifamily Guide* to assist project teams with planning, designing, constructing and operating NZE buildings. These and other resources can be found at <https://doee.dc.gov/service/netzeroenergy>. If the applicant is interested in NZE construction, either on this project or future projects, DOEE can be of assistance. Please reach out to Connor Rattey (DOEE) at connor.rattey@dc.gov for more information.

Solar

DOEE encourages the applicant to maximize the project's solar energy generation beyond the applicant's current commitment to generate 1% of common area energy use. DOEE recommends consulting with an expert from DCSEU to learn about custom rebate options and other financial incentives for renewable energy and energy efficiency measures.

Maximizing solar energy production will contribute to achieving the District's goals to rely on 100% renewable electricity by 2032 and increase local solar generation to 10% of total electricity by 2041. As a result of the District's commitments, there are many financial incentives to install solar. One way that the project can maximize solar energy production is to integrate solar photovoltaic arrays into green roofs. See the GAR and Stormwater Management section below for more details.

Climate Resilience

In order to prepare for the impacts of climate change, including increased flooding and extreme heat, DOEE encourages the team to assess how climate change will affect the project and to incorporate resilient design strategies. As part of the [Climate Ready DC Plan](#), DOEE released [Resilient Design Guidelines](#) to assist project teams considering climate resilient design. Additional DOEE Climate Adaptation and Preparedness resources are available at <https://doee.dc.gov/climateready>.

LEED offers [Resilient Design pilot credits](#) that guide project teams through identifying climate risks and mitigation strategies. USGBC offers [RELi 2.0](#), a dedicated rating system for resilient design and construction.

Green Area Ratio and Stormwater Management

Per regulations, the development of this site is required to meet minimum stormwater management and green area ratio requirements as specified in Chapter 5 of Title 21 and Chapter 6 of Title 11, respectively, of the District of Columbia Municipal Regulations. While the minimum required GAR score for MU-9 is 0.2, the applicant is encouraged to pursue a GAR score of 0.3, which is required in the existing zone, PDR-1.

DOEE encourages the applicant to incorporate solar energy generation into the building's roof design, which can be accomplished without diminishing the project's GAR or stormwater requirement compliance. DOEE has issued guidance on how to successfully incorporate solar into green roofs on pages 41 & 42 of the [2020 Stormwater Management Guidebook](#).

DOEE further encourages the applicant to consider maximizing rooftop solar energy generation and meeting some of its stormwater requirement offsite by purchasing SRCs. SRCs purchased from the municipal separated storm sewer system (MS4) are more environmentally beneficial than those from the combined sewer system (CSS), which is where this project is located.

DOEE is prepared to meet with the project team to discuss stormwater opportunities on the project site. To set up a review meeting with the stormwater team at DOEE, please contact Ayende Thomas at ayende.thomas@dc.gov.