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Re: Comments on Infrastructure Investment Jobs Act (IIJA), Section 40552, **Energy Efficiency and Conservation Block Grant** (EECBG) Program— Investments in Energy Efficient LED Outdoor Area Lighting and Related Advanced Technologies.

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INTRODUCTION

The Alliance to Save Energy is a bipartisan, nonprofit coalition of business, government, environmental, and consumer leaders advocating to advance energy efficiency adoption and is a leading voice informing federal and state energy efficiency policies and standards. We thank the U.S. Department of Energy (DOE or Department) for the opportunity to provide unsolicited comment and recommendations related to the use of identified appropriations as provided in the IIJA for the EECBG program.

IIJA makes $550 million available for the EECBG program for FY 2022 until expended. Program funds are made available to states, local governments, and tribes for the purpose of increasing energy efficiency, reducing fossil fuel emissions, and developing strategies that reduce energy use.[1] The EECBG statute among other things allows funds to be used for investments in energy efficient outdoor lighting, including LED lighting and other technologies.[2]

DISCUSSION

According to DOE's 2020 study, *Adoption of Light-Emitting Diodes in Common Lighting Applications*, there were 49.7 million street and roadway installations in 2018, of which 24.2 million were LEDs. The study identified that if all installations were LEDs with 95th percentile efficacy, there would have been a savings of 25.6 TWh. Furthermore, DOE's research found that if certain lighting controls were also part of the installation, then the total savings would equal 31.5 TWh— which is the potential equivalent of 24,607,445 million tons of carbon dioxide

[1] https://www.energy.gov/bil/energy-efficiency-and-conservation-block-grant-program.
[2] 42 U.S.C. 17154 (12).

emissions, and enough electricity to power 4,343,585 homes for a full year.[3] Total annual energy cost savings would equal $3.3 billion.[4]

DOE has a history of advancing LED outdoor lighting technologies, understanding the value these investments have on emission reductions and energy cost savings. In 2010, as part of the American Recovery and Reinvestment Act, DOE created the Municipal Solid-State Street Lighting Consortium, consisting of 500 municipalities, utilities and others.[5] The purpose of the consortium was to develop a clearing house of data and experience to assist cities and towns across the country purchase and implement efficient lighting technologies.

DOE also later implemented the Outdoor Lighting Accelerator (OLA). OLA sought to develop a set of best practices and toolkits to assist municipalities in overcoming the challenges associated with deployment of LED and advanced lighting technologies.[6] As a result, over 1.3 million lights were replaced during the two-and-a-half-year period of the program.[7]

RECOMMENDATION

In an effort to build on past success and to increase penetration of LED technologies in area outdoor lighting, the Alliance to Save Energy proposes the following, while also recognizing the other permissible uses of EECBG funds:

- In future funding availability announcements, DOE should make clear that EECBG funds can be used to upgrade, replace, or install outdoor area lighting with energy efficient LED and advanced lighting technologies. DOE should also inform states, municipalities, local governments, and tribes that outdoor street lighting can equal their first or second largest energy use,[8] and that LED technologies "can reduce energy costs by approximately 50% over conventional lighting technologies and provide additional savings of 20 to 40% with advance lighting controls."[9]

- DOE should encourage eligible entities to partner and coordinate with utilities, including municipal utilities and rural electric cooperatives, when applying for funds to upgrade, replace, or install outdoor area lighting with energy efficient LED and advanced lighting technologies.

- Determine whether utilities, including municipal utilities and rural electric cooperatives, as a governmental body are an eligible entity under the statute and if so, allow such eligible entities to apply for EECBG funds when those utilities own the outdoor lighting equipment and have the responsibility for installation and maintenance.

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[3] https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results.
[4] https://www.energy.gov/sites/default/files/2020/09/f78/ssl-led-adoption-aug2020.pdf.
[5] https://www.energy.gov/eere/ssl/doe-municipal-solid-state-street-lighting-consortium.
[6] https://betterbuildingssolutioncenter.energy.gov/accelerators/outdoor-lighting.
[7] *Id*.
[8] https://www.aceee.org/toolkit/2015/01/reducing-energy-use-public-outdoor-lighting.
[9] https://www.energy.gov/eere/slsc/outdoor-lighting.

- DOE should prioritize energy efficient outdoor lighting requests within the category when grant applications consist of two or more municipalities or governmental bodies in a single region or area that are serviced by the same utility.

- When providing EECBG funds for upgrading, replacing, or installing outdoor area lighting with energy efficient LED and advance lighting technologies, DOE should ensure that grant recipients are connected to relevant DOE programs and best practices.

CONCLUSION

DOE has already completed significant work to facilitate deployment and installation of outdoor area LED lighting and related advanced lighting technologies. A focus on LED technologies as part of EECBG funding availability, including potential access to utilities as eligible entities, has the ability to drive greater LED adoption and assist in meeting climate, clean energy, and energy savings targets.

The Alliance appreciates the opportunity to provide comment related to IIJA funding of the EECBG Program. Please contact Vincent Barnes, Senior Vice President of Policy, Research and Analysis at vbarnes@ase.org regarding questions or requests for additional information.