

July 22, 2020

The Honorable Bob Casey
United States Senate
393 Russell Senate Office Building
Washington, DC 20510

Dear Senator Casey,

I am very fortunate to have lived in the beautiful state of Pennsylvania my entire life. As a student at Carnegie Mellon University taking a summer research course in light pollution, I have become aware of the negative effects that light has on our planet. I am worried that our state and ultimately our planet are at risk of being greatly altered by light pollution.

Research has found that, in the United States, thirty-five percent of outdoor lighting is wasted due to improper shielding. Per year, \$3.3 billion dollars are wasted and 21 million tons of carbon dioxide is released into the atmosphere. In addition to energy waste, many types of wildlife are being impacted by our improper use of artificial light. Animals have always relied on the consistent pattern of night and day to help guide them in reproduction, sleep, migration, and nourishment. As you know, Pennsylvania has tons of wildlife such as whitetail deer and rainbow trout that are being affected by our actions.

I am asking you to bring these facts to the attention of the public. With more awareness, people will be more conscious of the way in which they use artificial lighting. In addition to this, I urge you to speak with the municipalities of the state about replacing older, less energy-efficient lighting systems with LEDs. It is important that the municipalities follow the recommendations of the International Dark Sky Association when installing a new lighting system. I believe that we have the ability to make our world a better place to live in if we become conscious of the effects of our artificial lights.

Sincerely,



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