LIGHTING

LED lighting. Lighting is responsible for about 2% of total U.S. electricity consumption and 4% of residential sector electricity consumption.[1] LED lighting uses 90% less energy that incandescent bulbs and half as much as compact fluorescent lights (CFLs), because they transfer almost all of their energy into creating light, not heat.[2] While the price of LED bulbs is 2-3 times higher than incandescent bulbs and fluorescents, it is falling rapidly,[3] and since LED bulbs last more than 25 times as long as incandescent bulbs,[4] LED lights actually have a lower lifetime cost. LED lights can be deployed in homes, buildings, commercial use, and streetlights, to name just some of the opportunities.

- Fishery friendliness: LED lights have no negative impacts on fisheries or fishery ecosystems. Furthermore, by reducing the amount of energy needed for lighting, they can reduce the amount of energy production needed to maintain current standards of living, including energy that is produced in fishery-unfriendly ways.
- Co-benefits: LED lights can help home and building owners and tenants save money on electricity bills.
- Environmental externalities: There do not appear to be any negative environmental externalities associated with LED lights. To the contrary, LED lights (which contain no hazardous materials) can have positive environmental side-effects when they displace CFL bulbs, which contain toxic materials that can affect human health when broken and leech into the environment when disposed of at landfills.[5]
- Policy catalysts: Adoption of LED lighting can be enabled and incentivized through building codes, utility-based demand reduction programs, low-income energy efficiency programs, government procurement and lead-by-example policies, certification incentives (e.g., LEED, Energy Star), carbon pricing, education programs, and bulb giveaways.
- More information:
    - Drawdown: LED lighting
    - Department of Energy: LED lighting

Continue reading at https://fisheryfriendlyclimateaction.org/solutions

[1] EIA (February 3, 2021). "How much electricity is used for lighting in the United States?" https://www.eia.gov/tools/faqs/faq.php?id=99&t=3
[2] Drawdown. "LED lighting." https://drawdown.org/solutions/led-lighting
[3] Drawdown. "LED lighting." https://drawdown.org/solutions/led-lighting
[4] DOE. "LED lighting." https://www.energy.gov/energysaver/led-lighting
[5] UK Energy Lighting. "How does LED lighting help the environment?" https://ukenergylighting.co.uk/how-does-led-lighting-help-the-environment/