

## Item 9: Advancing the Environmental Sustainability of the Clean Energy Transition (Enviro-SET) GFO-24-301

July 10, 2025, Business Meeting

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- Research addressing:
  - Clean energy technologies
  - Decarbonized window designs
  - Energy efficient artificial lighting

• Funding 5 projects ~ \$3 million





- Support streamlined development of renewable energy
- Reduce energy use and costs by identifying appropriate lighting
- Reduce environmental impacts of renewable energy, decarbonized buildings, and exterior lighting

## 9a: Lawrence Berkeley National Laboratory (EPC-25-002)

**Project Focus:** Test bird-friendly windows for decarbonized buildings

### **Benefits:**

- Incorporation of bird-safety requirements into energy standards
- Results in International Glazing Database to encourage adoption

## Funding Amount: \$600,000



Source: Giroux glass

# **9b. University of California, Davis** (EPC-25-003)

**Project Focus:** Study soil carbon storage, panel performance, and biodiversity at large ground mounted PV sites

#### **Benefits:**

- Soil carbon offsets
- Improved PV performance
- Accelerating renewable energy buildouts
- Support native plant communities and fossorial wildlife



Source: Encore Renewable Energy

### Funding Amount: \$599,812

# 9c. University of California, Merced (EPC-25-004)

**Project Focus:** Environmental cost-benefit valuation of power-over-water deployment

#### **Benefits:**

- Increased solar panel efficiency
- Cost savings in permitting and interconnection
- Habitat impact mitigation
- Water conservation

Funding Amount: \$589,265



Source: UC Merced

# 9d. University of California, Davis (EPC-25-005)

**Project Focus:** Biologically appropriate lighting aligning energy efficiency and nature conservation

### **Benefits:**

- Mitigating outdoor lighting impacts on essential nocturnal species
- More efficient lighting standards

### Funding Amount: \$498,601



Source: PBS

# **9e. Mohave Ground Squirrel Conservation Council (EPC-25-006)**

**Project Focus:** Adaptively managed translocation and propagation of state threatened Mohave Ground Squirrels

#### **Benefits:**

- Streamlined environmental permitting and compliance at solar sites
- Facilitating solar project siting
- Broadly accelerating renewable energy buildouts

Funding Amount: \$600,000



Source: Mohave Ground Squirrel Conservation Council



- Adopt staff's recommendation that 5 agreement are exempt from CEQA
- Approve 5 agreements for a total funding of \$2,887,678